THE JOURNAL
of the
Kansas Medical Society

VOL. XXXII TOPEKA, KANSAS, JANUARY, 1931 No. 1

Published Monthly under direction of the Council. Annual Subscription, $2. Single Copy, 20c.
700 Kansas Avenue, Topeka, Kansas

Entered as second-class matter May 2 , 1914, at the Postoffice at Topeka, Kansas, under the Act of March 3, 1879. Accepted for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized on July 2, 1918.

CONTENTS

ORIGINAL ARTICLES

Tuberculosis of the Mesenteric Lymph Glands—Milton B. Miller, M.D., Topeka 1
Diabetus Mellitus—B. P. Smith, M.D., Neodesha 4
A Visit to Medical Clinics in Europe—C. Alexander Hellwig, M. D., Wichita 10
On the Relation that May Exist Between the Mortality from Enlarged Prostate in Marine and in Inland Localities—E. H. S. Bailey, Ph.D. 14
Report of Staff Meeting—R. McE. Schauffler 15
Eye Injuries—F. A. Latimer, M.D., Alexander, Kansas .. 18
Tuberculosis Abstracts 19

EDITORIAL

Legislative Possibilities 22
The Nurse Problem 24
An Important Decision 27

MISCELLANEOUS

Chips 27
American Board of Obstetrics and Gynecology 30
Societies 31
Deaths 32
Books 32

Resolved

1. Taste the Syrup.
2. Test the Tablets for Toleration
3. SEND TODAY FOR BOTH

COMPOUND SYRUP OF CALCREOSE is a tasty, effective cough syrup that does not nauseate.

Each fluid ounce represents Calcreose Solution, 160 mins.; Alcohol, 24 mins.; Chloroform, approximately 3 mins.; Wild Cherry Bark, 20 grs.; Aromatics and Syrup, q. s.

TABLETS CALCREOSE 4 GRS. provide the full expectorant action of creosote in a form which patients tolerate.

Each tablet is equivalent to 2 grains of creosote combined with hydrated calcium oxide.

Doctor—Check your choice of offers and return the lower corner with anything showing your name and address.

We do not advertise to the laity.

☐ Free sample of both.

☐ **Enter order** for 1M Calcreose Tablets, price $3 postpaid, and include **free** 1 doz. 3 oz. Syrup for clinical trial.

THE MALTBIE CHEMICAL COMPANY, Newark, N. J.

KANSAS
LIBRARY
JAN 17 1930

So PURE, It Needs No FLAVORING

Vitamin A is known to possess certain anti-infective properties, particularly in relation to the eyes, lungs and upper respiratory tract, including the sinuses. Vitamin D is known to prevent and cure rickets.

MEAD'S 10D COD LIVER OIL WITH VIOSTEROL

Many physicians prefer to prescribe vitamins A and D in the form of Mead's Standardized Cod Liver Oil. In cases where extra Vitamin D is required or in cases where the patient cannot tolerate normal doses

for VITAMIN A DEFICIENCIES and

of Mead's Standardized Cod Liver Oil and is thus unable to obtain the necessary amount of vitamin D, Mead's 10 D Cod Liver Oil with Viosterol is indicated because it may be given in half the normal dosage, still assuring adequate amounts of vitamins A and D.

for the PREVENTION and CURE of RICKETS

Samples and Literature on Request. Mead Johnson & Company, Evansville, Indiana, U.S.A.

Pioneers in Vitamin Research and Specialists in Infant Diet Materials

THE TROWBRIDGE TRAINING SCHOOL

A HOME SCHOOL for NERVOUS and BACKWARD CHILDREN

The Best In The West

Beautiful Buildings and Spacious Grounds. Equipment Unexcelled. Experienced Teachers. Personal Supervision given each Pupil. Resident Physician. Enrollment Limited. Endorsed by Physicians and Educators. Pamphlet upon Request.

E. HAYDN TROWBRIDGE, M. D.

650 Chambers Bldg. Kansas City, Mo.

CHRIST'S HOSPITAL

TOPEKA, KANSAS

122 Bed General Hospital, Training School for Nurses, Affiliated with Washburn College—Maternity Department an entire floor—every modern appointment.

MATERNITY—MEDICAL—SURGICAL
PHYSIOTHERAPY—HYDROTHERAPY

MARTHA E. KEATON, R.N., A.B.,
Superintendent of Nurses.

NORMAN J. RIMES,
Superintendent.

THE EVERGREEN SANITARIUM

500 Maple Avenue, Leavenworth, Kansas
For Nervous and Mental Disorders, Alcoholism and Drug Addiction

CAPACITY 26 BEDS **ALL SINGLE ROOMS**

Located on 12-acre plot, one and one-half miles from center of City of Leavenworth, on U. S. highway No. 73. Bus service every 20 minutes. Pleasant shaded lawns. Nice, quiet place for nervous people who desire rest.

MRS. CLARA C. GODDARD, Matron
Or Address DR. A. L. SUWALSKY, Supt., Wulfekuhler Bldg.

THE JANE C. STORMONT HOSPITAL

TOPEKA, KANSAS

Training School for Nurses

General Hospital—75 Beds

Medical, Surgical and Obstetrical Cases Received.

THE TULANE UNIVERSITY OF LOUISIANA

GRADUATE SCHOOL OF MEDICINE

Approved by the Council on Medical Education of the A.M.A.

Postgraduate instruction offered in all branches of medicine. Courses leading to a higher degree have also been instituted.

A bulletin furnishing detailed information may be obtained upon application to the

DEAN, Graduate School of Medicine, 1430 Tulane Ave., New Orleans, La.

POST-GRADUATE SCHOOL OF SURGICAL TECHNIQUE INC.

2512 Prairie Avenue (opposite Mercy Hospital) Chicago, Illinois

A School of **Surgical Technique** conducted by Experienced practicing Surgeons

1. **General Surgery:** Two weeks' (100 hours) course of intensive instruction and practice in surgical technique combined with clinical demonstrations (for practicing surgeons.)
2. **General Surgery and Specialties:** Three month's course comprising: (a) review in anatomy and pathology; (b) demonstration and practice in surgical technique; (c) clinical instruction by faculty members in various hospitals, stressing diagnosis, operative technique and surgical pathology.
3. **Special courses:** Orthopedic and traumatic surgery; gynecology and radiation therapy; eye, ear, nose and throat, thoracic, genito-urinary and goiter surgery; Bronchoscopy, etc.

All courses continuous throughout the year.
Detailed information furnished on request

MORTON E. BROWNELL, M. D.
Practice limited to Ophthalmology
1019 1st National Bank Bldg.
Wichita, Kansas

FRANK C. BOGGS, M.D.
Eye, Ear, Nose and Throat
Mills Building TOPEKA, KANSAS

HUGH WILKINSON, M. D.
Practice Limited Exclusively to
Surgery and Consultation
430 Brotherhood Bldg., Kansas City, Kansas

E. S. EDGERTON, M. D.
Surgeon
Suite 910 Schweiter Bldg. WICHITA, KANSAS

W. F. BOWEN, M. D.
MILTON B. MILLER, M. D.
SURGEONS
212 Central National Bank Bldg.
Telephone 6120 Topeka, Kansas

OPIE W. SWOPE, M. D.
RADIOLOGIST
Superficial and Deep X-Ray Therapy
Radium Therapy X-Ray Diagnosis
713 First National Bank Bldg.
WICHITA, KANSAS

LESLIE LEVERICH, M.D., F.A.C.S.
Practice limited exclusively to Obstetrics
Normal and Operative
430 Brotherhood Bldg., Kansas City, Kansas

M. S. GREGORY, M. Sc., M. D.
NEUROPSYCHIATRY
(Stammering Treated)
708 Medical Arts Bldg. Oklahoma City

DR. S. T. MILLARD
Practice Limited to
DERMATOLOGY
Nat'l Reserve Life Bldg. Topeka, Kansas

J. A. H. WEBB, M. D.
X-RAY
310 Schweiter Bldg. Wichita, Kansas

T. E. HORNER, M. D.
Obstetrics
HOSPITAL FACILITIES 206-7 Simpson Bldg.
Atchison, Kansas

NELSE F. OCKERBLAD, M.D., F.A.C.S.
Practice limited to Urology
Complete cystoscopic room and x-ray in office.
1530 Professional Building
Kansas City, Mo. Tel. Harrison 3331

FRANK FONCANNON, M. D.
SURGEON
405-6 Citizens Bank Bldg. Emporia, Kansas

X-Ray and Radium
LEWIS G. ALLEN, M. D.
Phone Drexel 2960 Suite 704 Commercial National Bank Bldg., Kansas City, Kansas

WALTER H. WEIDLING, M. D.
OBSTETRICS and
GYNECOLOGY
700 Kansas Avenue Topeka, Kansas

DR. LA VERNE B. SPAKE
EYE, EAR, NOSE and THROAT
322 Brotherhood Bldg., Kansas City, Kansas

Arthur D. Gray, M. D.
Ernest H. Decker, M. D.
DRS. GRAY AND DECKER,
Urology, Dermatology and Allied Diseases.
Radium and x-Ray Therapy.
Suite, 721-723
Mills Bldg. Topeka, Kansas

J. G. MISSILDINE, M.D.
Urologist Dermatologist
906 Brown Bldg.
Wichita, Kansas

RAYMOND G. HOUSE, M. D.
Practice limited to
DERMATOLOGY
405 Schweiter Bldg., Wichita, Kansas

E. A. REEVES, M. D.
OBSTETRICS and GYNECOLOGY
Hospital Facilities
322 Brotherhood Bldg., Kansas City, Kansas

W. J. EILERTS, M.D.
SURGEON
Suite 809 Schweiter Bldg.
Wichita, Kansas

OFFICIAL NURSES' REGISTRY
Registered Nurses' Directory of District No. 1,
Kansas State Nurses Association
Felicitas Dyer, R.N., Registrar
Telephone 2-2259 Topeka, Kansas

G. W. JONES, A. M., M. D.
Diseases of the Stomach. Surgery and Gynecology
RADIUM USED AND FOR RENT
LAWRENCE HOSPITAL AND TRAINING SCHOOL
Phone 35 or 1745 Lawrence, Kansas

ALFRED O'DONNELL, M. D.
Surgeon
ELLSWORTH, KANSAS

J. F. HASSIG, M. D.
SURGEON
804 Elks Bldg. Kansas Cty, Kansas

C. S. NEWMAN, M. D.
SURGEON
615 N. Broadway Pittsburg, Kansas

GEO. E. COWLES, M. D.
OBSTETRICS and GYNECOLOGY
902 Brown Bldg. Wichita, Kansas
Office Telephone 2-2404 Residence Telephone 3-8097

CLAUDE C. TUCKER, M.D.
Practice Limited to Diseases of
Rectum and Sigmoid colon
1003 Schweiter Bldg.
Phone Douglas 2449 Wichita, Kansas

J. A. DYER, M.D.
Surgery and Urology
J. R. SCOTT, M.D.
Eye, Ear, Nose, Throat
F. A. TRUMP, M.D.
Internal Medicine and Diagnosis
OFFICE PHONE 1626

The Ottawa Medical and Surgical Clinic
CLINIC BUILDING
OTTAWA, KANSAS
Complete Laboratory Facilities

L. V. DAWSON, M.D.
Surgery and Gynecology
W. L. JACOBUS, M.D.
X-Ray, Fractures
H. K. B. ALLEBACH, M.D.
Obstetrics and Diseases of Children

OKLAHOMA SKIN AND CANCER CLINIC
Formerly Drs. Lain and Roland
Medical Arts Building
OKLAHOMA CITY, OKLAHOMA
Everett S. Lain, M. D.
Wm. E. Eastland, M. D.
Marion M. Roland, M. D.
Chas. E. Davis, M. D.
Darrell G. Duncan, M. D.

THE

Lattimore Laboratories

J. L. LATTIMORE, A. B., M. D., Director

ROUTINE ANALYSES, SEROLOGY,
BACTERIOLOGY, PATHOLOGY, PARASITOLOGY
BLOOD CHEMISTRY
COMMERCIAL CHEMISTRY

Solutions of Any Kind Made From Your Specifications.
Intravenous Solutions, Glucose, Mercurochrome, Etc.

Containers furnished upon request. Wire report if desired.

A. C. KEITH, Chemist-Toxicologist

Topeka, Kansas	El Dorado, Kansas	Sedalia, Mo.	McAlester, Okla.
J. L. Lattimore	J. C. McComas	R. C. Carrel	W. J. Dell

After all is said and done
the final analysis in setting a standard
upon which to judge the necessary fitness of a milk modifier is

Quality, Efficacy and Experience

Mellin's Food ACCEPTED AMERICAN MEDICAL ASSN. Committee on Foods **A Milk Modifier**

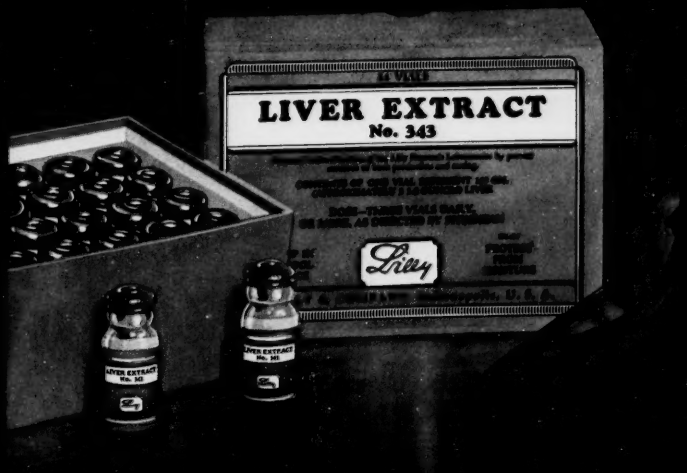
Accepted as a product of high quality
Meets the purposes of a milk modifier
Sustained by an experience of more than sixty years

Mellin's Food Company **Boston, Mass.**

Information relative to composition and suggestions in regard to use furnished to physicians upon request.

LIVER EXTRACT No. 343

A Specific
in Pernicious Anemia



SUPPLIED THROUGH
THE DRUG TRADE

EPHEDRINE
PRODUCTS
LILLY

Curiosity GAVE THE WORLD A NEW AND IMPORTANT MEDICINE . . . PHYSIOLOGICAL STANDARDIZATION MADE THIS MEDICINE UNIFORMLY POTENT . . . . . .

OLD MOTHER HUTTON, the Shropshire herb-woman, guarded her secret jealously. Had not her herb tea relieved an Oxford dean of his dropsy, when all other remedies had failed? To satisfy his curiosity, Dr. William Withering sought out the old woman, nearly 150 years ago. At first she stubbornly refused to talk to him. But finally one argument prevailed. There was the clink of golden sovereigns in Mother Hutton's palm, and the cherished recipe was his!

Withering saw that the crudely written scrawl called for twelve common herbs and plants. After long and patient trial he found eleven of them medicinally worthless. But in the twelfth, the purple foxglove, he found a new and powerful drug, now more commonly known as digitalis.

Physicians welcomed Withering's contribution to medicine, but they soon found that the use of digitalis was attended by a serious difficulty. Extracts made from the drug were by no means uniform in potency. Some were too weak; others were much too strong for safety.

For over a century, physicians and pharmacists grappled with the problem of making uniform extracts of digitalis. Then, in 1898, exactly 113 years after Withering's discovery, the Parke-Davis medical research laboratories announced the first *standardized* tincture of digitalis.

. . .

Parke, Davis & Company is justly proud of the part it has played in introducing, developing and extensively applying the principles of chemical and physiological standardization. No product leaves our laboratories until there have been applied to it all the tests that scientific investigation has found necessary to determine its purity and potency as a medicinal agent.

PARKE, DAVIS & COMPANY

DETROIT NEW YORK CHICAGO KANSAS CITY ST. LOUIS BALTIMORE NEW ORLEANS
MINNEAPOLIS SEATTLE In Canada: WALKERVILLE MONTREAL WINNIPEG

The world's largest makers of pharmaceutical and biological products

Green Gables
THE
DR. BENJ. F BAILEY
SANATORIUM
Lincoln, Neb

This institution is the only one in the Central West with separate buildings situated in their own ample grounds, yet entirely distinct and rendering it possible to classify cases. The Main Building being fitted for and devoted to the treatment of non-contagious and non-mental diseases, no others being admitted. The other, Rest Cottage, being designed for and devoted to the exclusive treatment of select mental and nervous cases requiring for a time watchful care and special nursing.

Send For Illustrated Pamphlet

Mercurochrome—
220 Soluble
(Dibrom-oxymercuri-fluorescein)

THE STAIN PROVIDES FOR PENETRATION

and

FIXES THE GERMICIDE IN THE TISSUES

Mercurochrome is bacteriostatic in exceedingly high dilutions and as long as the stain is visible bacteriostasis is present. Reinfection or contamination are prevented and natural body defenses are permitted to hasten prompt and clean healing, as Mercurochrome does not interfere with immunological processes. This germicide is non-irritating and non-injurious when applied to wounds.

Hynson, Westcott & Dunning, Inc.
Baltimore, Maryland

In pneumonia

Optochin Base

For the specific treatment of pneumonia give 2 tablets of Optochin Base every 5 hours, day and night for 3 days. Give milk with every dose but no other food or drink. Start treatment early

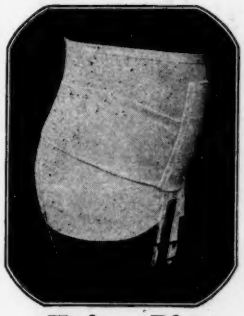
Literature on request

MERCK & CO. INC. **Rahway, N. J.**

"A word fitly spoken—how good!"

Recently this word came from a distinguished M.D.—"The Storm has been tried and proven."

"STORM" The New "Type N" Storm Supporter



meets demands of present styles in dress.

Long special laced back.

Extension of soft material low on hips.

Hose supporters attached.

Takes Place of Corsets

Adaptable to Pregnancy, Ptosis, Hernia, Obesity, Sacro-Iliac Relaxation, High and Low Operations, etc.

Ask for Literature

Each belt made to order in 24 hours
Originator, Owner and Maker

KATHERINE L. STORM, M.D.
1701 Diamond Street Philadelphia

THIS SERVICE CAN HELP YOU!

To help the public appreciate the value of the eye physician, we have prepared a series of educational pamphlets. These are designed for distribution to your patients.

This is typical of the co-operation which we give legitimate oculists.

We cater exclusively to oculists with a strictly wholesale manufacturing prescription service. Write or phone for details.

O. H. GERRY OPTICAL COMPANY

Manufacturing Opticians
2nd Floor Grand Avenue Temple

Kansas City, Mo.

A COMPLETE MEDICAL LABORATORY SERVICE

WICHITA CLINICAL LABORATORY

J. D. Kabler, Director

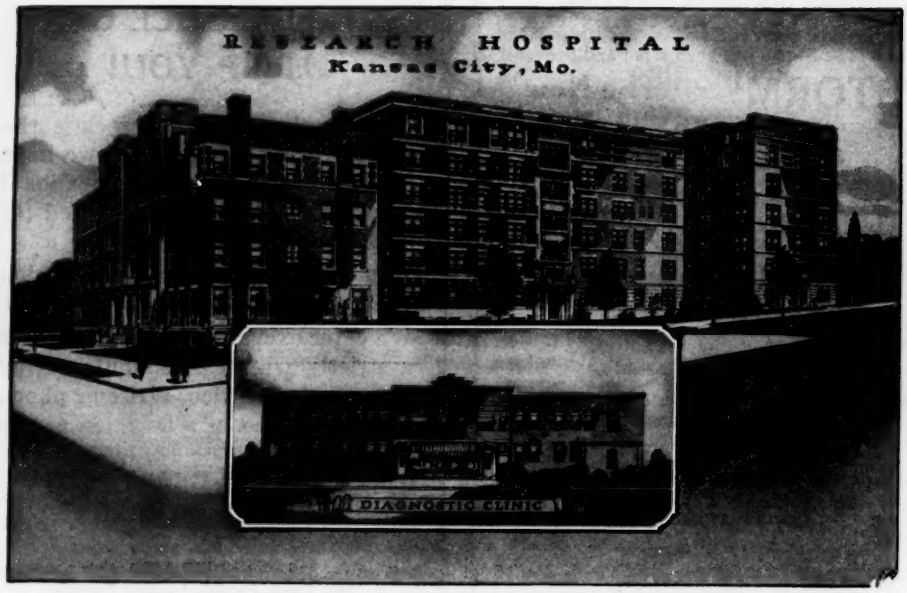
Why not have your patients with Allergic symptoms (Asthma, Hay-Fever, Hives, Eczema, Migraine and recurring acute intestinal disturbances) thoroughly tested for diet and surrounding inciting agents, such as, fur, feathers, dust, hair, smoke, etc?

Remarkable results are being obtained by proper testing and removal of the inciting causes in the above conditions.

304 Schweiter Bldg., Wichita, Kansas.

Dial 3-5317
Reports Wired.

Wassermanns Run Daily



The Diagnostic Department of Research Hospital

The Diagnostic Department of Research Hospital was established in November, 1924. Patients are received for diagnosis from reputable physicians. On completion of examinations, reports, which include the patient's history, physical examination, laboratory and X-ray reports, the findings of various specialists and the final diagnosis with recommendations for treatment, are sent to the patient's physician—in no instance will reports be given to patients. The fee includes all necessary tests and examination. The following departments are represented:

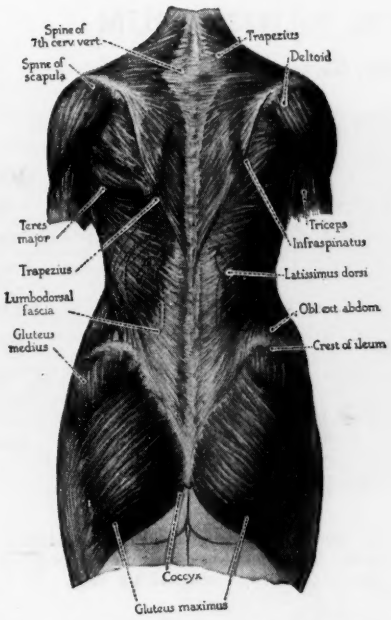
Medicine, Surgery, Orthopedics, Neurology, Oto-Rhino-Laryngology, Ophthalmology, Urology, Dermatology, Gynecology, Obstetrics, Radiology, Pathology, and Electrocardiography.

For further information address:

THE DIAGNOSTIC DEPARTMENT OF RESEARCH HOSPITAL

23rd and Holmes Sts., Kansas City, Mo.

ANATOMICAL STUDIES



SUPERFICIAL MUSCLES OF THE BACK IN THE FEMALE

for the Practitioner

Sets of Anatomical Studies furnished to physicians upon request.

CAMP

Physiological Supports Scientifically Designed

S. H. CAMP & COMPANY
Manufacturers
JACKSON, MICHIGAN

Chicago Merchandise Mart
New York 350 Fifth Ave.
London 252 Regent St. W.

Founded 1896 by Dr. Hubert Work

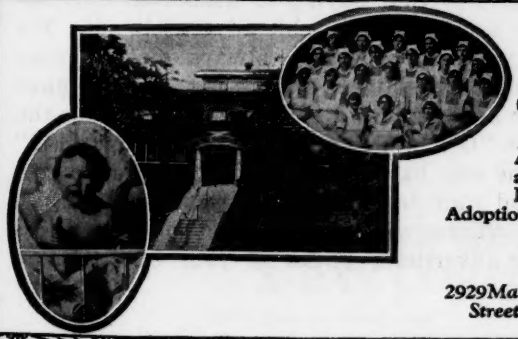
WOODCROFT HOSPITAL, PUEBLO, COLO.

New Buildings
New Equipment
Neuro-Psychiatric Clinic

NERVOUS AND MENTAL DISEASES

Drug Addictions

H. A. La Moure, M.D.
Superintendent



The Willows
Maternity Sanitarium
ESTABLISHED 1905

A privately operated seclusion maternity home and hospital for unfortunate young women. Patients accepted any time during gestation. Adoption of babies when arranged for. Prices reasonable.

Write for 90-Page Illustrated Booklet

2929 Main Street — The Willows — Kansas City, Mo.

JAMES Y. SIMPSON, M.D.,
Neurologist and Addictologist

HERMON S. MAJOR, M.D.,
Neuro-Psychiatrist

SIMPSON–MAJOR SANITARIUM

3100 Euclid Avenue, Kansas City, Mo.

Nervous Diseases. Selected Mental Cases. Alcohol Drug and Tobacco Addictions

Electricity
Heat
Water
Light
Exercise
Massage
Rest
Diet
Medicine

Beautifully situated in a pleasant residence section of the city. Fully equipped and well heated. All pleasant outside rooms. Large lawn and open and closed porches for exercises. Experienced and humane attendants. Liberal, nourishing diet. Resident physician in attendance day and night.

DEAR DOCTOR: Please Read This

The advertising space in this Journal is worth what you and other physicians in this state make it. When you buy from the firms who patronize this Journal you not only protect yourself against questionable products but you increase the value of this Journal for its advertisers.

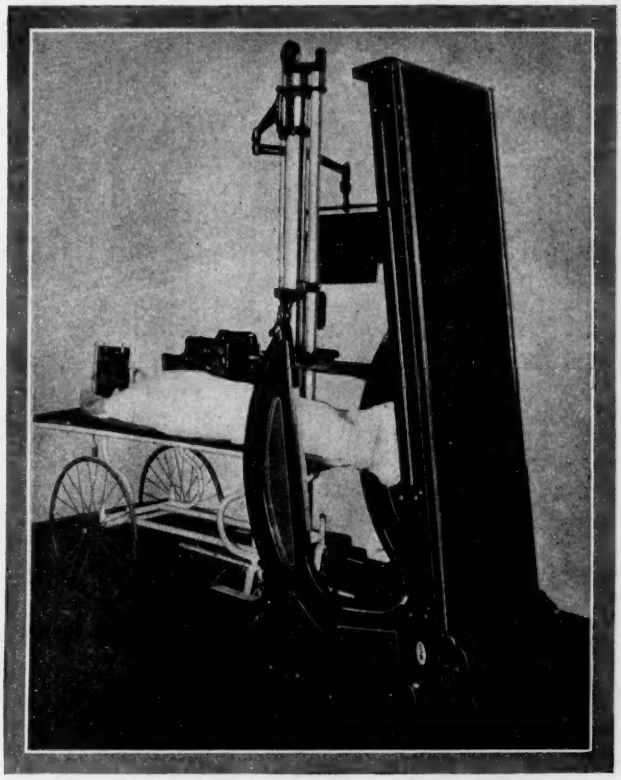
Not all desirable advertisers use space in this publication; but most of them will do so when they learn that the present patrons secure good results. This can only mean that unless you give preference in your buying to firms that now advertise here, you are merely helping to keep other desirable advertisers out. We earnestly urge you to co-operate with your publishers in always making your own State Journal the medical authority for reliable advertising. If you have not done so begin now. When you are asked to buy medicinal or other goods the first question to ask yourself should be "Is it advertised in our State Journal?" If not, the advertising for good reasons may have been declined in order to protect you and you would do yourself and your Journal a kindness by declining to patronize them. Other desirable advertisers will use space in your Journal when you let their salesmen know the advertising pages of your own State Journal are your guide.

THE PROFESSION RENDERS ITS VERDICT ON THE VICTOR SHOCK-PROOF

Only the Victor Shock-Proof permits this

Illustration shows the Victor Shock-Proof X-Ray Unit, Model B, applied in a manner never before possible with any other type of x-ray apparatus. Assume this to be an emergency case, where a radiograph of the head is desired, and the condition of the patient preventing transfer to the x-ray table. With this Victor Shock-Proof Unit, it is only necessary to raise the table top, wheel the patient's cart into position, focus the tube (within the shock-proof head), and proceed with the making of the radiograph. A fluoroscopic examination may be done with the same facility.

Bear in mind, that in such procedure there is no danger of the high voltage system coming in contact with you or your patient, as the Victor Shock-Proof Units are, as the name implies, 100% electrically safe.



"The Shock-Proof has given me a new conception of the *use of x-ray technic*"

"I HAVE been the proud possessor of the Victor Type A Shock-Proof X-Ray Apparatus for almost one year and can give unqualified endorsement of its capability and ease of handling," writes a Missouri physician.

"As a general practice in which it has been used, it has been revolutionary in the excellent quality of pictures, unusual adaptability to any position or angle, and in the feature of electrical safety. It is especially satisfactory in fluoroscopy above or under the table, or for the unlimited positions at any conceivable angle or across table. The apparatus is easily and readily changed to meet the desired setting, even by a very small technician as I happen to have.

"The shock-proof apparatus has given me a new conception of the use of x-ray technic. To say that I am highly pleased with my outfit is scant praise. . . . I can gladly recommend this apparatus to any prospective user of x-ray equipment."

Let us send you an illustrated brochure and tell you where in your vicinity you may see the Victor Shock-Proof in use.

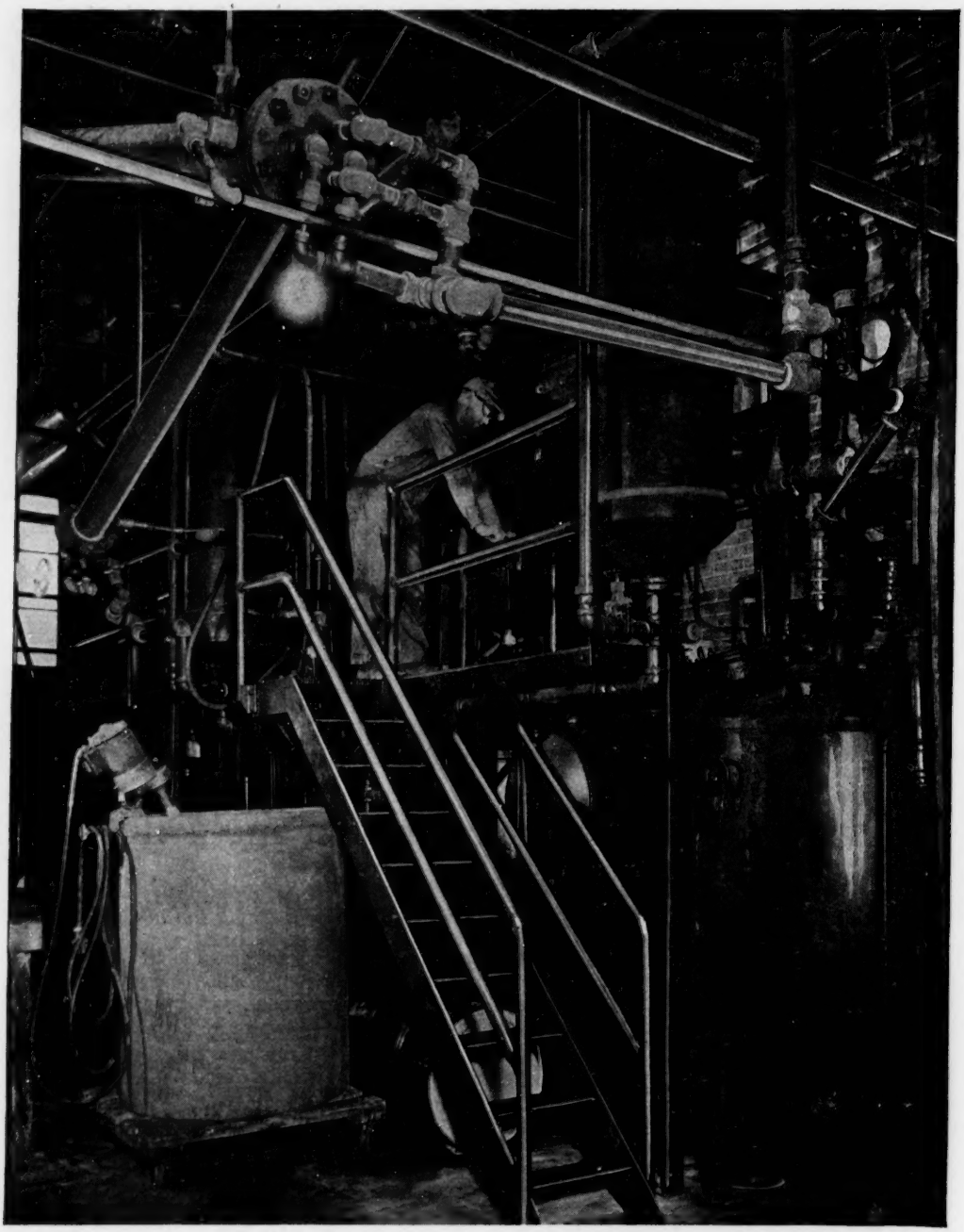
Kansas City, Mo. **208 Y. W. C. A. Bldg.**

GENERAL ELECTRIC X-RAY CORPORATION

2012 Jackson Boulevard **Chicago, Ill., U. S. A.**

FORMERLY VICTOR X-RAY CORPORATION

Join us in the General Electric program, broadcast every Saturday evening over a nationwide N. B. C. network



Stills and condensers employed in the production of Amytal and Sodium Amytal
View in the chemical department of Eli Lilly and Company, Indianapolis

ILETIN (INSULIN, LILLY), LIVER EXTRACT No. 343
PARA-THOR-MONE, MERTHIOLATE, EPHEDRINE PREPARATIONS

THE JOURNAL
of the
Kansas Medical Society

VOL. XXXII TOPEKA, KANSAS, JANUARY, 1931 No. 1

Tuberculosis of the Mesenteric Lymph Glands

MILTON B. MILLER, M.D., Topeka

Read before the annual meeting of the Kansas Medical Society, at Topeka, Kan., May 7, 8 and 9, 1930.

Tuberculosis of the mesenteric lymph glands, or tabes mesentericus, has long been recognized as a clinical entity. Considerable has been written on the subject, and my only purpose in bringing it forth again is to further emphasize its importance. It must not be forgotten in the consideration of some of our obscure abdominal pains, particularly in the lower right quadrant. There is no question that it is frequently present and never recognized, and when surgeons are more or less on the look out for the condition, the incidence in their cases is higher.

Figures of various authors would indicate a high percentage in children, yet, in our experience it is found more frequently in young adults and those between the ages of 15 and 35. In our series of 51 cases recorded between 1925 and 1930 there were only 6 under 15 years of age, 22 between 15 and 20, 19 between 20 and 35, 4 over 35, and one at age 60.

In early infancy it is considered quite rare, though a Spanish author, De La Alberca,[1] reports three cases that came to autopsy, all under 6 months of age, with extensive tubercular involvement of the mesenteric glands.

ETIOLOGY

Both the bovine and human types of organisms are found. Bacilli may be ingested either in milk or milk products of tuberculous animals. The human type may come from the swallowing of infected sputum. In the greater percentage of cases where bacteriological study has been made, the organisms have been of the bovine type.

The mode of infection is generally believed to be through the intestinal mucous membrane to the glands which drain it. Carson[2] believes there must be some breech in the intestinal mucous membrane, but the general opinion of numerous authors is that it is not necessary for the tubercle bacillus to cause a lesion in the intestinal mucosa previous to entrance into the lymph glands of the mesentery. Willensky and Hahn,[3] and also Bell[4] discuss the analogy existing between the cervical lymph nodes and the lymphadenoid tissue of the pharynx, the tonsils and the intra abdominal lymphatic apparatus, namely the mesenteric lymph glands, and the Peyer's patches of the terminal ileum. It being assumed that Peyer's patches, like the tonsils, form the point of entry for the infecting bacteria. The ileo-cecal group of mesenteric glands are the ones most frequently affected, and Corner[5] believes this to be due to a physiological reason which he describes as a comparative stasis of the products of digestion in a mildly alkaline medium at this site—a condition which he thinks favors the passage of tubercle bacilli through the intact mucous membrane of the bowel.

There is some difference of opinion as to whether the tubercle bacillus is the etiological factor in all cases of mesenteric lymphadenitis. Struthers[6] believes that most cases in which the tubercle bacilli have not been demonstrated, are, nevertheless, reactions provoked by the invasion of that organism. The reaction perhaps of a filterable virus has been suggested in some research work of the Rockefeller Institute. Braithwaite[7] believes the tubercle bacillus to be the infecting organism in all cases. Rosenberger,[8] who has made extensive bacteriological study of the mesenteric glands, found in a group of so called non-tuberculous cases—that is those in which it was impossible to demonstrate tuberculosis in any part of the body—that involved mesenteric glands showed

no tubercle bacillus in the spreads, but that inoculation of guinea pigs made from the maceration of these glands, produced positive tubercular lesions in 40 per cent of the cases, and in another group, where there were involved glands in definite tuberculous subjects, 97 per cent of these glands showed infectivity in animal inoculation.

PATHOLOGY

The pathological process developing in the tubercular lymph glands of the mesentery has been found similar to the tubercular lymph nodes in other parts of the body. The findings are dependent on the stage of the process, the primary lesion is of course the tubercle and these tend to coalesce and produce swelling or simple hyperplasia. The gland may then go through the intermediary stages of fibrosis and caseation to the final stage of calcification.

Hyperplasia may become marked, periadenitis develop, followed by some local peritonitis and the formation of adhesive bands as reported by some, with complicating obstruction of the bowel. Or a rupture of a caseous tumor may occur as seen by some, with development of general peritonitis, which is more common in children, according to Dr. Charles Mayo.[9]

Cases have also been reported of obstruction of the ureter and of the common bile duct by pressure of caseous or calcified tuberculous mesenteric glands.

In our series of cases we have noted frequently the presence of enlarged glands in other parts of the body, particularly in the inguinal and cervical regions. In a recent case we excised both an inguinal and a mesenteric gland for diagnostic purposes and in both a definite tubercular structure was reported from the pathological laboratory.

It is of interest to note that enlargement of the mesenteric lymph nodes is practically never seen with the ordinary types of acute appendicitis, however bad the local pathology may be. Struthers[6] brings out this point in his discussion of the subject.

SYMPTOMS

Due to the wide distribution of the mesenteric glands the symptoms may develop in any part of the abdomen, but for physiological reasons, previously mentioned, the ileo-cecal group are most often affected, giving us our symptoms in the right lower quadrant. In most cases the disease runs a more or less chronic course, with or without acute exacerbations and usually lasting several years. However, the symptoms may be so acute at any time with severe right lower quadrant pain, muscular rigidity, elevated temperature, increased pulse rate and leucocytosis, that immediate operation becomes imperative because, under these circumstances, who will take the risk of putting aside the possibility of an acute appendicitis? Appendicitis still is, and probably always will be, a treacherous disease, and in doubtful cases a "wait and see" policy is apt to be followed by disastrous results, especially in children. With most of the acute attacks of pain from tubercular mesenteric glands, the patients do not show the general appearance of a severe illness, and these acute symptoms may subside in several hours, or last a day or so. In several of our cases it has happened that an acute abdomen was observed by the family physician, before bringing the patient to the hospital, but at the time of our examination, perhaps several hours later, the abdomen has been found relaxed and the pain practically gone. Pain in these cases is only elicited on deep pressure over the ileo-cecal region. Again it has been noticed in some of these cases that not only the abdomen has become relaxed, but that there is as much tenderness on the left side of the abdomen as on the right and the glands are often palpable in both areas. Operations when done on these patients, have revealed most commonly an almost normal appendix, or at least one so little affected that it is obviously insufficient to give rise to the symptoms complained of. But here we find numerous enlarged mesenteric glands in the ileo-cecal angle or palpable mesenteric glands elsewhere, removal of which, for pathological examination has invariably shown a definite tubercular structure.

The most common form of this disease, as we have observed, has been the

chronic type. The patients are, as a rule, not of the rugged type, but rather are slender, poorly nourished, of poor color and often anemic; they tire easily, have lost weight or fail to gain in weight. These findings, however, are not absolute, as occasionally some of the robust type have been found with positive tubercular mesenteric glands. In those of the chronic type, we may find a slight rise in the daily temperature over a period of time, not so often an increase in the blood count, but if the white count is increased, the "polys" more often are not. Rarely is there found any other tuberculous focus in the body, and this has been checked by several authors with *x*-ray of these cases. In only one of our cases was there a showing of definite tuberculosis, which was in the chest, and this case died several years later of tuberculosis. This particular patient had a child one year previous to her death that also died at the age of 6 months from tuberculous meningitis.

The presenting symptom in the chronic type is pain, usually of an intermittent character, the pain may be in most any part of the abdomen, depending on the group of mesenteric glands involved, but, as mentioned, is more common in the right iliac fossa. Sometimes this pain is described as sharp and colic like, or may be of a drawing or dragging character. These pains may come several times during the day, come on suddenly and stop as suddenly as they came on, then disappear entirely, not to recur for several weeks, a month or more. The pains, as a rule, have no relation to the intake of food.

Carson[7] believes this pain to be the result of a reflex spasm or colic, with contraction of the circular fibres of the small intestine, incited by irritation of the vagus filaments in the mesentery.

Those of the chronic type tend to have acute exacerbations. The operative finding in the chronic cases reveals, as in the acute form, the enlarged mesenteric glands, varying in size from a small pea to the size of a hazel-nut or small almond, and these glands are usually in the ileo-cecal angle. Sometimes the glands are soft or we may see both the soft and the calcified. In our series we have not found any of the suppurative type or any of the large caseous and large calcified glands described by some of the writers on this subject.

DIAGNOSIS

In the diagnosis one must consider of first importance the history of the illness, with particular reference to the character of pains; next the type of patient, especially the slender undernourished individuals; then, the presence of other lymphatic enlargements as being suggestive; and finally the feeling of palpable glands within the abdomen, with more or less tenderness over these glands.

The *x*-ray examination has, in recent years, been found to be of great value in the diagnosis of the calcified mesenteric glands producing abdominal symptomatology. Calcified glands may or may not produce symptoms. Dunham and Smythe,[10] who have done a great deal of work in this line, describe in detail the usual appearance of these glands, namely as being white and not homogeneous, often spoken of as "honeycombed," "moth eaten," "mottled," or "coarsely stippled." They state the advisability of taking both antero-posterior and lateral exposures and also the making of repeated films to determine the position, and to know definitely that they are retaining that position.

The lateral films will show the mesenteric glands anterior to the bodies of the vertebrae, thus differentiating them from stones in the kidney. As a further aid to diagnosis may be mentioned the von Pirquet test, which is considered by some of value in children.

In the differential diagnosis it must be stated again that the most frequent abdominal condition, acute appendicitis, is most often difficult to differentiate, but it is far safer to err by the removal of an inoffensive appendix. Other conditions to be considered are chronic appendicitis, stone in the kidney or ureter, pyelonephritis particularly in children, intussusception, Mechel's diverticulitis, tumors of the abdominal organs.

Complications mentioned by various writers are ileus, abscess formation, per-

foration, pressure on the common bile duct, the ureter or portal vein, miliary tuberculosis and tuberculous peritonitis.

TREATMENT

The treatment of tuberculosis of the mesenteric lymph glands may be medical and surgical. Of particular importance is prophylaxis. Eliminate the possibility of infection by milk from tuberculous cows—see that the tuberculin test has been given these cows. In the medical care it must be emphasized that the usual treatment for tuberculosis is essential, that is, rest, high caloric diet, fresh air and sunlight, heliotherapy being of decided value. Ultra violet therapy, when it can be used under proper supervision, is considered of exceptional value, particularly in the chronic form with anemia, and in those having acute exacerbations. The few cases we have treated with the quartz light have shown marked improvement. The *x*-ray also has been used with great success by some, particularly during the last few years. And this mode of treatment should not be overlooked, as we have all seen the good effects of *x*-ray therapy in tuberculosis of the cervical glands.

Drug therapy we believe also of considerable value, and in our cases we have advised the use of hydriodic acid and the calcium creosote compounds, taken over a period of months, with interval rest periods, the patients to be kept under observation to avoid gastro-intestinal or other disturbances.

Surgically we believe these cases get along better if their appendix is removed, especially that group of cases where the acute attacks so simulate an acute appendicitis that it is impossible to differentiate. There are tubercular mesenteric glands, however, that demand surgical removal, because, on account of their size, they produce pressure symptoms, or because they have become large, caseous, calcareous or suppurative tumors, producing other intra abdominal complications.

In our series none of these more serious types were found, but numerous cases are cited in the literature.

SUMMARY

In summary would say, tuberculosis of the mesenteric lymph glands is not an uncommon disease. It is by no means confined to children, but, as our records show, its occurrence in early adult life is just as prevalent.

The symptoms are not always clearly defined and in the acute attacks are with difficulty differentiated from acute appendicitis. In the chronic type, with pains of a rather definite character, the feeling of palpable intra abdominal glands and other palpable glands in the body of an undernourished patient, is fairly diagnostic.

In the treatment I would stress prolonged medical care as in the treatment of any tuberculous patient, and surgery for the complications, to include appendectomy in cases with the persistent right lower quadrant pains, with accompanying mesenteric involvement.

BIBLIOGRAPHY

1. Alberca De La, E. L.: Primary Congenital Tuberculosis of the Mesenteric Glands. Archives Espanolde Pediatria, 687, 696, Nov. 1925.
2. Carson, A. W.: Tuberculous Mesenteric Glands, Clinical Aspects of. Lancet 1918, Vol. 1.
3. Willensky, Abraham O. and Hahn, Leo: Mesenteric Lymphadenitis. Annals of Surgery, Vol. LXXXIII, June 1926.
4. Bell, Leo P.: Mesenteric Lymphadenitis Simulating an Acute Abdominal Condition. Surgery, Gynecology & Obstetrics, Vol. XLV, Oct. 1927.
5. Corner, E. M.: The Surgical Treatment of Tuberculous Glands. Lancet 1905, Vol. II, British Medical Journal Vol. II 1908.
6. Struthers: Mesenteric Lylmphadenitis Simulating Appendicitis. Edinburg Medical Journal, 1921.
7. Braithwaite, L. R.: Tuberculosis of Glands in The Ileocecal Angle: A Cause of Pain in the Right Iliac Fossa. British Journal of Surgery, Vol. XIII No. 51, Jan. 1926.
8. Rosenberger, Randle C.: A Study of the Mesenteric Glands in Their Relation to Tuberculosis. Proc. Pathological Society. Philadelphia, May 11, 1905.
9. Mayo, Charles H.: Tuberculous Peritonitis. Minnesota Med. April 1921.
10. Dunham and Smythe: Tuberculosis of Abdominal Lymph Nodes. American Journal of Diseases of Children, Vol. 31, June 1926.

Diabetes Mellitus

B. P. SMITH, M.D., Neodesha

Read before the annual meeting of the Kansas Medical Society at Topeka, Kan., May 7, 8 and 9, 1930.

Diabetes Mellitus is a disease of disturbed metabolism of the glandular structures particularly of the pancreas and the glycogenic relation of the liver. It is characterized by a continuous pathological amount of sugar in the urine, or glycosuria. Glycosuria is not always diabetes, but diabetes mellitus is always glycosuria. This disturbed metabolism is confined largely to carbohydrate foods, but it appears that both proteins and

fats enter into the conditions known as diabetes, as both may enter into the condition of acidosis. Continuous high ingestion of fats figures in acidosis, which is the thing most dreaded and hard to handle in diabetes as we will show later. Continued excess of glucose in the blood eventually breaks down the equilibrium and resistance of the patient and the toxic conditions then arise.

Diabetics usually get along fine under regular regimes, but whenever an acute infection sets in we immediately have an exaggerated condition, therefore as a result of diabetes the patient is continually under a fight for life so, when any additional work is required, he is unable to combat the extra effort.

Diabetes is a disease as old as man, but the first history is about A. D. 25 when Celsus, a Roman physician, learned something about it. Sustra of India was aware of the sweet taste of urine, in the seventh century. Dobson later proved this to be sugar. About the first real study was in 1855, when Claude Bernard found that by puncture of the diabetic center in the medulla glycosuria would result, proving there is a diabetic center. Von Merrig and Minkowski later found that from extirpation of the pancreas of dogs diabetes resulted. This is the first proof that diabetes is not a renal but a pancreatic disease. We know now that the pancreas as a whole is not affected but the Isles of Langerhans. The blood sugar content is the vital thing to the patient and the main clue to the condition of the patient, but the urine findings are practically sufficient to carry all patients, with only an occasional blood sugar test.

Before going further, I wish to state that diabetics are very rarely cured, but we are able to lengthen the life of all patients that are properly treated. I believe we are now lessening the death rate but the statistics seem to prove oherwise, but I believe this is because diabetes is now looked for and reported, when in the past they all died and were not reported as diabetics. In years to come, I look for a gain in the death rate, for the lives of those now being treated will come to their end of time and be reported, so I am prone to say once a diabetic always a diabetic. Today it is a reflection upon the physician to not recognize a diabetic, yet it is easy to do so, for the family history is not correct, and we do not get a clinical picture until the disease is far along. However, even with the most simple office equipment, no one should pass up the diagnosis. We must remember that the normal blood sugar is from .06 to .12 per cent, but most people run near the higher point. When the blood sugar gets to .17 per cent we reach the renal threshold and the sugar spills into the urine and we find it there first because urine examination is so simple compared to the blood sugar test. Urine is usually the first proof, unless the case is far along, when there is shown a line of symptoms, such as general malaise, fatigue, loss of flesh, sweet breath, in women perhaps loss of menstrual function, frequent micturition, history of eating lots of sweets, sticky urine, clothes sticky, and the doctor finds the positive urine. Continued line of symptoms, as the case becomes more toxic, are drowsiness, heavy deep breathing, and in extreme cases coma. The symptoms may take another lead before these above listed and infections in any part of the body may occur usually around the urinary openings, especially in females, boils, furuncles, eczematous conditions and lastly gangrene. Coma is also in line. Perhaps later on we find a visual disturbance, diabetic cataract, or artificial myopia.

Diabetic urine usually carries a heavy sp. gr. and this is a valuable point. However, diabetic urine in patients being treated heavily with insulin may not run high. I have found many times urine positive for sugar with sp. gr. from 1005 to 1000. This was during a time when there was a large ingestion of liquids and the patient was taking around 200 units per twenty-four hours. The normal sugar content of the urine is .02 per cent which cannot be detected outside of the laboratory.

We told you normal blood contained .06 to .12 per cent of sugar which is equivalent to 60 to 120 milligrams to 100 cc. of blood. When blood sugar gets

around 300 most cases become comatose, however, patients tolerate sugar in different amounts. Again, urine may not always show sugar exactly according to the blood sugar. As long as the liver is able to store up glucose we do not have a glycosuria, but when it has reached its capacity or some other disease sets in, glycosuria shows up. Therefore we find any liver pathology is intimately connected with the pancreatic function, both from a physiologic and anatomical, or pathological standpoint. Dever once said if you have diabetes have your gall bladder operated upon. He should have said have the liver studied. The liver turns loose its sugar at two special times, first, when there is a low ingestion of carbohydrate foods, second, when the body actions are using especially large amounts of glucose.

The ingestion of carbohydrate foods immediately increases the blood sugar, but with a normal metabolic process it does not become pathological, but the diabetic is unable to burn up the sugar and it is therefore left in the blood to be excreted by the kidney. It appears that up until recently glucose was the only sugar that could be measured in the blood. This may be true yet.

When we realize that two-thirds of the body energy is derived from glucose, we will realize what it means to the patient to lose this vital food, or to have it limited in his diet. If glucose did not come from fats and proteins also, the diabetic could not last very long. Some other sources also yield glucose, such as glycol, aldehyde, glycerol, and lactic acid. Carbohydrates yield 100 per cent sugar, proteins 58 per cent, fats 10 per cent. Some claim fats do not yield sugar but it is generally conceded they do.

In the acidosis of diabetes we have the most dreaded complication, because of the inability to correct diet and get proper assimilation. I believe we will be able to show that some of us have been wrong in feeding against this condition. For instance, we advise the patient to cut down his carbohydrates and eat more fats and proteins. He does this, first because he is hungry, second because he demands food to keep going. In other words it takes calories to keep each of us going. As a result of the ingestion of fats and proteins we have deposited in the body the fatty acid products as B-hydroxy-butyric acid, diacetic acid and acetone, some amino acids such as tyrosin, leucine and phenylalinin, which yield fatty acids. It is proven that proteins also yield as much as 46 per cent fats, so the protein high content is injurious, because it contributes to the fatty acid formation. Fat is a less readily oxidized food and must have fire to burn it and that fire must come from union with carbohydrate foods. So we must have some carbohydrates to do this.

Acidosis is supposed to be due to high blood sugar but everyone knows that the fatty acids and acetone bodies are prevalent in this condition, but the absorption of fats when added too largely to a diabetic diet is really adding the very thing we want to eliminate. We must find a happy middle ground. In diabetics the power to burn sugar is lost and then we find the ketones in the urine.

At some time or other there had to be an infection in the Isles of Langerhans to destroy their function for that is really the diabetic pathology. This may again set up or be again due to infective processes in other parts of the body. This may enter by the blood stream, lymphatics, or by direct injury. So diabetes is a disease of the internal secretion of the pancreas but yet the normal action of the secretions of the pancreas are still of vital importance. No real gain had been made in diabetes until the last eight years, when Banting and Best discovered the secretion of the Isles of Langerhans which they named insulin. Since that time diets have been studied and added to our knowledge. We may as well say that diabetes is a disease caused by the lack of insulin in the blood. For it is the action of insulin in the blood that makes sugar fit for the assimilation of the body.

Diabetes is more prevalent in the Hebrew race. Fat subjects are especially liable to diabetes. People of sedentary habits are also. Tudor says one out of each one hundred have diabetes. Only 10 per cent of diabetics are underweight.

This should be modified and applied to the ambulatory time for in the end all are thin, unless they die of some acute complication.

Vomiting is the symptom of acidosis that causes our blood to run cold. Inability to keep down food and a wasting disease don't make a happy picture. These practically always bring up large amounts of bile after all the food is emitted. This seems to me to prove again the close relation of the liver function in diabetes.

Treatment of diabetes is really the point at issue, for it is nearly criminal now not to make an early diagnosis. In the past treatment was a diet process, with perhaps codeine, which are both good yet, and the use of general tonics. Today the treatment is first diet, second diet and insulin and third includes the first two together with all modern lines of treatment of shock, for this covers the cases that have gone to the operating room or have had acute acidosis with general systemic and organic exhaustion. It is impossible in so short a time to keep these lines of treatment separate.

Many diabetics are able to get along with only diet restrictions, especially those who are at middle life or older. The child does not stand diabetes well, so needs closer observation and the young adult is in about the same class.

Treatment with insulin is by no means a child's play but a very serious matter. Many today owe their lives to insulin and I dare say some few have hurriedly passed away because of injudicious insulin treatment. The physician who has not had insulin experience often has to learn it from his patient who has been hospitalized and come home with instructions. After many years daily with insulin, I just begin to learn it. I believe treatment of insulin shock, or hyperinsulinism is more vital to the physician and patient than the real treatment of the disease. Insulin is perhaps the most potent of all endocrine products and it always does as it is supposed to do. When it goes wrong it does so because the administrator has not known it.

The first symptoms of hyper-insulinism, are faintness, excitability, wide open eyes, rapid pulse, hunger, then to go on to severe sweating and coma. You who have never seen a severe reaction are either lucky or else have not had experience with insulin. I dare say every person treated with insulin has had more or less reaction. Usually food of a sugar nature will suffice to check this condition and every patient should at all times carry some candy with him. Give them food of any kind that is available, but sugars are best. Those that go into coma have to have glucose per vein. It is most gratifying to see these patients come out of this sleep, while the needle is still in the vein. Insulin coma is due to an extreme reduction of the blood sugar, and the condition looks as ghastly as death itself. I have never known the glucose intravenous to fail, in my experience.

Every diabetic should in beginning treatment have all his food taken away and the tests run to ascertain his condition. Then add food and see how much he can take before sugar is pathological. If he cannot take sufficient calories to live and enjoy life or work, he must have insulin added. Insulin first reduces the hyperglycemia, second removes the glycosuria, third removes the ketonuria, fourth causes the liver to store glycogen when given with insulin, fifth causes the respiratory quotient to be raised, when sugar is added to the food, sixth removes the general subjective symptoms of diabetes, seventh causes the body weight to be increased and eighth prolongs life. This is all done because of some action by insulin in the blood stream not yet understood.

After any reaction, we must cut down the dose of insulin. These reactions are not always due to the dose administered but because the pancreas may be coming back and is secreting insulin itself. We cannot estimate the amount, so it is time to be careful. I have found many times it is hard to cut down the dosage fast enough in a convalescing patient. In some serious cases it is hard to diagnose between coma from diabetes and insulin coma, but in diabetic coma there is more stupor, it comes on slower and does not show the extreme sweating and the exhaustion that insulin does. Again your

knowledge of when and how much or no insulin clears the field.

Convulsions are often a result of hyper-insulinism. These can most always be traced to a definite period of time after the last dose or the time two doses reach their height of action. The patients usually come out of this before treatment can be given or else go on into coma. Some have the convulsive actions but come out with only the ingestion of syrups, without losing consciousness.

In administering insulin it is well to bear in mind that all diabetics carry a higher blood and urine sugar in the early morning and forenoon than in the later part of the day, so this will give you the cue that you can give twice as large a dose of insulin early in the day as you can in the evening without reaction. Insulin is supposed to reach its height of action in four hours but I have found in some patients that it is five hours. One unit of insulin will care for 2½ grams of carbohydrates, 2 grams of protein or 1.5 grams of fat. In severe diabetics I have found we need to give much more insulin than this would lead you to think, because we cannot measure the action of the patient.

The twenty-four hours dosage of insulin is from 10 units to near 300 according to my experience. Every case is different and must be worked out individually. In ambulatory cases insulin should be given in relation to ingestion of food. Reactions are often due to the patient not taking insulin at the proper time. I saw a severe coma due to taking insulin at 11 p. m. when the last food was taken at 5 p. m. and the dosage was her customary amount. It is very rarely that an insulin reaction takes place between 1 a. m. and 12 m. If it does, someone is to blame. Ambulatory cases should never have this occur, because their dosage should be stopped longer than five hours before this time. In severe cases with acidosis insulin may be given every hour. Ten units, until test shows results, twenty units every two hours or forty every four hours. The first dose may be especially large and with safety. Forty to fifty units and repeated soon, if no results, in cases of coma or severe acidosis. The vomiting of acidosis is a feature that nothing but insulin will stop. So practically all these cases have to come near the reaction stage before results are apparent. I like then to see the reaction and to hear the patient call for food. Insulin alone will stop an acidosis but it will do it quicker if given with glucose. Therefore insulin and glucose in the treatment for acidosis. If unable to take or retain any food, we will give it by rectum at the rate of 2½ per cent each glucose and soda. If it is not retained give it by intravenous route, 500 cc. per three hours. In these cases I always give normal saline hypodermoclysis, 500 cc. as conditions warrant, three or four times in twenty-four hours. As sedatives, codeine, pantopon or morphia if need be, I prefer pantopon. I am of the opinion that hypo-insulinism, or blood short of insulin is a direct irritant to the vomiting center, for I have many times seen patients begin to vomit at four or five a. m., when no insulin had been given for eight to ten hours, stop vomiting immediately upon the dose of thirty to forty units of insulin. I know you will say this is due to acidosis, but it seems unpractical to say the whole acidosis could be changed so soon, but the blood condition is changed at once, and vomiting stops for that twenty-four hour period but with other doses of insulin following. Rarely do ambulatory cases ever need doses as high as 100 units per day. Acute cases may need very high doses. One case in mind carried a temperature of 104° at two points in the day about twelve hours apart for nearly three weeks, took twenty-five units each three hours. Had positive urine a lot of mornings but negative most every evening. Blood sugar ran to 380. Never any coma. This case for six years took forty units per day in one dose. She now for four months has been from bad to worse and we are unable to get her balance to remain at a certain point.

In gangrene I have given up to 240 units and made the urine sugar free but was unable to heal the foot. Yet two years ago we did heal a bad gangrene in this case with insulin. This case went to

amputation with sugar free urine, and the stump healed by first intention, and now seven months later she takes forty units twice a day and is in fine shape and urine sugar free most of the time.

Thus far we have shown that certain foods tend to cause certain conditions. I am of the opinion that Dr. Sansum is about right when he outlines a more normal diet for diabetes even if he has to increase insulin dosage. Since two-thirds of body strength comes from sugar, and both fats and proteins tend to form acidosis, it seems better to cut these down and give carbohydrates. A patient who is taking insulin can have taken from his diet 100 grams of fat and can add 130 grams of carbohydrates without the addition of more insulin. Since as much as 46 per cent of protein is converted into fats, it appears more logical that we give these calories in carbohydrates and reduce the ketone or fatty acid products. Diets must carry the necessary protein which is about one gram per kilo of body weight. This is imperative.

Patients taking 100 units or more per day will find very much satisfaction in taking five-elevenths of their daily dosage one hour before breakfast, three-elevenths one hour after dinner and three-elevenths one hour after supper. Those taking less may use the same schedule but the two dose plan seems more advisable, five-eighths one hour after breakfast and three-eighths one hour before the evening meal. Cases taking around thirty-five or forty usually are satisfactory on one dose either in the forenoon or afternoon. The social functions are more satisfactory with the afternoon dosage, for the extra voiding is then controlled.

Usually it is sufficient to handle these cases without continuous blood sugar examination, but in acute cases we run tests on every voiding of urine. Blood examinations are both depleting and unpleasant and are usually not run or the laboratory not available when you need it. Blood examinations are the proof. It is practically impossible to over dose when there is acetone in the urine. Again blood examinations are very expensive. Render your urine sugar free to a normal degree and then if the condition of the patient is unsatisfactory examine the blood.

The more liberal diet list, which is composed of two parts carbohydrate to one of fat, as used by Dr. W. D. Sansum, with sufficient proteins and sufficient insulin dosage has been found very profitable in my cases, while the one part carbohydrate, two of protein and three of fats as used by Dr. Majors has proven very satisfacory. I wish to say that I have studied the plans of both these men whom I hold at the head of all the list in the central west and west. Dr. Majors has been a personal adviser while Dr. Sansum only by his writing. Study both of them and arrive at your own conclusions.

SUMMARY

All treatment must be figured upon a caloric value. Patients in bed, adults, must have at least 1000 calories and increase as per the size and amount of labor one is doing. The average working man needs about 3500 calories. Frigid explorers need 8000. Foods are based upon the kilo weight of the body, which is the weight in pounds divided by 2.2. We need twenty to forty calories per kilo. Protein is absolutely essential and we must have not below 1.5 grams in children or less than two-thirds grams in adults per kilo. A 110 pound person weighs fifty kilos so he must have 50 grams protein, a greater amount will usually not make trouble if kept within reason and based upon conditions of patient.

Carbohydrates yield 100 per cent sugar, each gram has 4.1 calories.

Proteins yield 58 per cent sugar, each gram has 4.1 calories.

Fats yield 10 per cent sugar, each gram has 9.3 calories.

Therefore a maintenance diet for 50 kilos is:

Protein, 50 grams which is practically 200 calories.

Carbohydrates, 100 grams which is practically 400 calories.

Fat, 45 grams which is practically 400 calories.

You will note that two carbohydrate grams practically equals one gram of fat

in caloric value and that while the weights are two to one the caloric values are practically equal. It seems preferable to give the increased amount in carbohydrates and cut the amount of protein and fats below the average diet arrangement, thereby reducing the tendency to acidosis.

Insulin takes care of two and one-half to three grams of sugar per unit, or two grams of protein or 1.5 grams of fat per unit. Without doubt, it acts some on all these at the same time. As we have shown, we can take away 100 grams of fat and add 130 grams of carbohydrate without additional insulin. So an insulin unit nearly averages caring for two grams of food, when based upon the two to one ratio.

The highest sugar content is in the early part of the day, therefore the first doses of insulin should be much larger than later in the day, because now the blood insulin is low. Insulin shock or hyperinsulinism is most frequently in the afternoon and early portion of the night. Insulin will abate ketosis alone, but is much more efficient when given with carbohydrates. Fat oxidizes slowly and must have sugar to burn it.

Every patient should take not less than eight glasses of water per day. Don't let a small amount of urine with high sugar content fool you, for the urine test should be approximated upon a secretion of 2000 cc. whole day voiding, however, food may be based somewhat on each voiding. Acidosis patients must have insulin and glucose, so we give them freely carbohydrates with insulin, until they are able to retain other foods, then begin to cut the carbohydrates to the place desired, and then begin to cut the insulin until you get the diet balance desired.

———R———

A Visit To Medical Clinics In Europe

C Alexander Hellwig, M.D., Wichita

On a recent trip to Europe, I had the opportunity of visiting several medical centers and of exchanging opinions with some of my professional friends whom I had not seen for six years. After returning to this country, I found there was so much interest in medical conditions as they exist in Europe, that a report of my impressions seems justifiable.

One of the main objects of my trip was a visit to the Radium Institute of Paris, which is regarded as the most important cancer institute existing today in Europe. This is situated in the neighborhood of the famous Pantheon where the great thinkers of the French nation are buried. It contains a laboratory where Madame Curie carries on physical and chemical research work, and has a department for the treatment and study of cancer under the direction of Professor Regaud who has at his disposal seven grams of radium and six powerful *x*-ray machines. In addition there are laboratories for pathology, bacteriology, hematology, each one directed by full-time men.

Biopsy is done routinely and the pathological report is awaited before treatment is started. The pathologist is regarded by Regaud as an indispensable collaborator of the radiotherapist. Since radiosentivity depends greatly on the histological character of a tumor, the radiotherapeutic technique is influenced frequently by the histological diagnosis.

With the Radium Institute are connected an excellent secretarial service and a competent staff of visiting nurses. The patients are seen over a long period following the treatment, until all possibility of recurrence is past. For instance, if it is a case of cancer of the breast, every patient even though apparently cured, must be reexamined once a year for ten years. This follow-up system and the histological examination of every case guarantees the recognized reliability of Regaud's statistics.

Operable cases of epitheliomata of the skin under radium therapy produce over 90 per cent cures. Early cancers of the cervix yield the same proportion of successes under surgery as under radium therapy. But the latter cures many cases that are inoperable. In cancers of the mouth and tongue the results of radium therapy are superior to those of operative treatment. In cancers of the glandular tissues, radiotherapeutic methods have been much less favorable. Cancers

of the breast, so long as they are operable, should be operated upon and in cancers of the rectum, internal radium therapy has resulted, according to Regaud, in only a small number of cures, as compared with a large number of painful burns.

In Germany, special cancer-institutes are not popular. Only a few larger cities, as Berlin, Frankfurt, Munich have special clinics, which offer all modern conveniences for the surgical and radiation treatment of cancer, but most of the cancer patients are admitted in general surgical or gynecological hospitals where an assistant is charged with the scientific work of the cancer problem. Comparing the Cancer Institute of Berlin with the great center in Paris, one realizes that the world war left the whole of Germany financially embarrassed. She has but recently been able to buy radium in sufficient quantities. As a substitute, mesothorium is frequently used, the radioactivity of which decreases quite rapidly and deep *x*-ray therapy plays a much larger role than it does in France. The most modern and complete *x*-ray institute is directed by Dr. Holfelder of Frankfurt who visited this country several years ago and supervised the installation of German *x*-ray machines in the Cancer Institute of Buffalo, N. Y.

Most of the German clinicians believe that today surgery is still the method of choice in operable cancer and that radiation should be limited to the postoperative treatment and to inoperable cases. And all agree that cancer will never be controlled with the therapeutic agents we have today, but that through laboratory research there must be found the cause, prevention and cure of cancer.

I visited several laboratory investigators devoted to the study of cancer. In Fraenkel's Institute in Berlin, I saw the cultures of the famous *bacillus tumefaciens* which is considered by Blumenthal as a cancer producing agent. Warburg of the Kaiser Wilhelm Institute has introduced a new experimental method in the study of the etiology of cancer. His work on the metabolism of tumor cells is regarded as so promising that recently the Rockefeller Foundation donated the sum of $640,000 for the erection of a special laboratory where Prof. Warburg will be allowed to continue his research work. Warburg demonstrated large quantities of lactic acid in cancer tissue by means of a manometric method and explains it by the abnormal ability of cancer to split sugar to lactic acid. Fischer-Wasels, the well known authority on cancer in Frankfurt, applied Warburg's discovery to the treatment of malignant tumors. He reported surprising results in animal and human cancer, by exhausting the tumor with overbreathing.

I asked several authorities whether the various serological methods for the diagnosis of malignant tumors—as those of Boyksen, Freund-Kaminer, Abderhalden, Kahn—have a practical value, but all agreed that these serological tests are unreliable for diagnosing incipient cancer, because of their non-specificity. In doubtful cases, at present the only reliable diagnostic method is the histological examination. The value of biopsy being recognized, more theoretical objections have been raised by those who fear that biopsy would give a good chance of mobilizing tumor cells or of implanting them in the wound. Anscheutz of Kiel, however, has shown, by comparing the operative results in patients with and without biopsy prior to the radical operation, that such apprehensions are unfounded.

Refinement in the microscopic technique to the point of certainty in tissue diagnosis seems therefore the most urgent problem. Lipscheutz of Vienna believes that he has demonstrated a specific morphology in the cancer cell by his method of using Giemsa stain. His results, however, are not applicable to frozen sections. Biopsy and the use of frozen sections during operation are not as widely used in Europe as in America. Not any of the German and French clinics which I visited used the Wilson method of staining unfixed frozen sections with methylen blue. There are several reasons for it. The pathological institute of the larger German hospitals is as a rule far away from the surgical department and its tremendous work—

1000 to 2000 autopsies a year—keeps the pathologist so busy that he has no time to go to the operating room and cooperate personally with the surgeon, in arriving at a histological diagnosis during operation. Therefore the surgical specimens are mostly diagnosed by a surgical assistant who has had one or two years of pathological training but who is, of course, more interested in the technical side of surgery. He will leave the rotating service in the surgical pathological laboratory, before he has acquired a wider experience which is indispensable especially for the diagnosis of frozen sections. This present custom of burdening a young surgical assistant with the responsibility of diagnosing surgical specimens, especially biopsy material, was criticised recently by the celebrated Robert Meyer, who holds the only German full-time position of surgical pathology. He requires that the larger surgical hospitals have their laboratories under the direction of a full-time pathologist with long experience in this special line.

Before the war, the large German pathological institutes were known the world over as offering the most splendid opportunities for work. The horrible depression of 1920 to 1923 during the inflation of the mark, brought with it economic chaos not only to the majority of people but also to the scientific institutes. Today they are again well organized and equipped with the best working facilities. In Munich, a new pathological institute is built which is outstanding not only in its equipment, but also in its architectural beauty. When I visited the famous pathological institute of Berlin, which was organized by Virchow, it just underwent a thorough remodeling under its new chief Roessle.

The head of the pathological department at the Virchow Krankenhaus, Berlin's largest hospital, Dr. Anders, also a pupil of Aschoff, invited me to one of the pathological conferences which are held daily at the conclusion of the practical work. On this one forenoon, there were eight autopsies performed and at the conference the staff and the visiting clinicians had the opportunity of viewing all the material which was presented by the chief pathologist. The number of autopsies in this institute averages 80 per cent of the institutional deaths, or 2000 cases in one year.

A visit to the Medico-legal Institute of Berlin was also very instructive. In this, during last year, 900 autopsies of legal cases were performed. It contains besides chemical and histological laboratories a large collection of medico-legal specimens for the teaching of the so-called district physicians. The latter are officials of the state, who serve as health officers and as coroners. Laymen are not admitted to the coroner's office which is organized entirely along medical lines.

In Sauerbruch's large and busy surgical clinic one does not notice the economic depression, so general in Germany. The second floor of the building has a new and beautifully equipped operating room which contains three tables and three teams of assistants are rushed keeping up with him. The third floor is devoted to large laboratories for histolcgical and chemical research and operating rooms for experimental animals. The private rooms and wards have colorful furnishings and the walls are decorated with modern oil paintings. Sauerbruch's original work on lung surgery has gained him international reputation. His phrenicotomy and thoracoplastic operation for unilateral tuberculosis of the lungs are accepted as standard methods and these operations save 35 to 45 per cent of patients who cannot be cured by any other treatment. I saw Sauerbruch perform a resection of one whole lobe of the lung for non-tuberculous bronchiectasis and he reported about 45 lung resections with only two deaths. In a case of intrathoracic goiter he removed the large adenoma after splitting the sternum in the midline. Being more than a mere operator Sauerbruch tried out lately a special diet for his tuberculosis cases which proved very valuable in tuberculosis of the skin and the bones. In this diet sodium chlorid is withdrawn and protein intake limited.

Most of the German hospitals are state or municipal institutions and only

very few are owned by physicians or charitable societies. They have a closed staff, consisting of a department head and a large number of assistants. The chief has in addition to a large salary, the privilege of charging for his treatment of private patients. The latter occupy about 7 per cent of all hospital beds, most patients are insurance cases. In conversation with practitioners I learned that private practice amounts today only to one-tenth of that before the war, since national insurance is compulsory almost to everybody. Ninety-five per cent of all German practitioners depend financially entirely on the national insurance. There is the general opinion that this form of medical socialism is not only very uneconomical, but that the present system of health insurance together with the dole system for the unemployed weakens the desire to work in millions of men, putting idleness and hypochondria on a national subsidy basis.

From Berlin I went in four hours to Dresden, the capital of Saxony, to visit the International Hygiene Exposition, which was the greatest attraction in Germany this year. The center of the large territory is devoted to the Hygiene Museum which will stay as a permanent institution, the only one of its kind in the world. On its main floor, exhibits of embryology, normal anatomy and physiology of the human body are demonstrated to the lay public by means of beautiful pictures, wax models and anatomical specimens. Hordes of school children, college students and people from all parts of the world studied this unique and complete museum. I was fascinated especially by the collection of human organs made transparent by Spalteholz's method, showing the blood vessels by injection of colored material. I never realized before the vast blood supply of the kidneys, the heart and the thyroid gland. The second floor of the magnificent building is devoted to demonstration of the etiology, route of infection, prevention and pathology of the common infectious diseases. Here the same lucid method of using pictures, tables, photographs and specimens is used for instruction of the public.

In the Hygiene Exposition proper, most of the civilized nations had their own buildings. I was mostly interested in Dr. de Quervain's exhibit on goiter and cretinism in the Swiss pavilion. There was a collection of about 100 surgical specimens representing the different forms of the Swiss goiter. It was apparent that the latter differs widely from the American goiter. The diffuse colloid and exophthalmic goiter, which are the two most common types of goiter in this country, are very rare in Switzerland, whereas the large fetal adenomas prevail. In the German section, all phases of practical hygiene were represented concerning nutrition, domicile, climate, sport, etc. One large pavilion was devoted only to the hygiene of mother and child. There was also a complete hospital constructed with model operating rooms, Roentgen—and physiotherapy—departments, laboratories, patients rooms, kitchens. One building contained all facts on national health insurance and compensation after accident.

Anything having a relation to hygiene is exhibited with a completeness that is amazing and one wonders only how this exposition could be financed, in a time where the cities have to squeeze out every cent for the upkeep of municipal necessities. The tremendous sacrifice can be explained only by the belief of the people of Dresden, that a hygiene exposition is no luxury, but an institution of greatest educational value to everybody.

I departed from Europe with the impression left on my mind, that despite the miserable economic conditions which prevail, and despite the grave outlook of the country as a whole, there was no noticeable diminution of scientific energy and spirit.

———R———

What puzzles us about the dinosaur, after following the dispatches for a time, is the trait of leaving its thigh-bones in Arizona and its eggs in Mongolia.—Detroit News.

✣ ✣ ✣

Jack—Gladys married a self-made man, didn't she?

Nancy—Yes, but she was compelled to make extensive alterations.

On the Relation That May Exist Between the Mortality from Enlarged Prostate In Marine and In Inland Localities

E. H. S. Bailey, Ph. D.

Emeritus Professor of Chemistry, University of Kansas

In the examination of the statistics of mortality in what the Public Health Service calls "diseases of the prostate" it is possible from the U. S. Census (1921) and State Health reports to obtain some interesting figures.

We know from a study of the prevalence of goiter in certain localities that the absence of iodine in the soil and water of some regions seems to be related to the prevalence of this disease. It is well known that in the State of Michigan, for instance, there is very little iodine in the soil or in the water, and goiter is very common; so it has even been proposed to mix minute quantities of potassium iodide with the commercial table salt (NaCl) put on the market. At present, opinions differ as to the advisability of this course.

Little is known in regard to the relation of diet, water supply, soil or altitude as affecting the prevalence of "diseases of the prostate," another disease where glands are involved; so any light that may be thrown on this problem may be of value.

From mortality statistics it is shown that the mortality is greater in cities than in rural disricts. This is possibly due to a more accurate diagnosis in the cities than in the country. The Bureau of the Census reports the annual average in the "registration area" for the last twenty years as showing a gradual increase as expressed in death rates per 100,000 of population from 2.6 to 5.3. The highest death rate is found in Kansas 6.3 (cities 7.9, rural districts 5.8) with Minnesota also among the highest, and the lowest death rate is in South Carolina 2.00 (cities 6.7 and rural districts 1.5) with North Carolina and Delaware also low.

It occurred to the author that there might be some relation between the mortality in the so-called "marine" states and those in the "interior." The states in the "registration area" were classified, showing 19 states bordering on the ocean or large rivers near the salt water, and 15 in the interior.

For a single specified year the average mortality was:

For the marine state.....3.62
Inland 5.02
For total U. S. 4.30

Unfortunately, no satisfactory statistics could be obtained for 14 states.

It must be admitted that an examination of this kind should cover 10 to 20 years to eliminate the high and low figures of different years and, as has been suggested to the author, it would also be much better if we had "specific ratios to include only the male population comprised within the limit of the age of the earliest death and the oldest." The figures given, however, may have some significance which is more than accidental.

In those states bordering on the seashore a large part of the area is at a considerable distance from the salt water. At present it has been possible in only two states to study this factor.

The author was fortunate enough to obtain for the year 1927 the death rate in each county of Connecticut. There are 8 counties, 4 of which border on the shore of Long Island Sound. Death rate for the inland counties was 7.1. Death rate for the marine counties was 4.8. In the case of the state of Maine, the inland population (a little more than half that of the state) gave a death rate of 6.2, and the marine death rate was 3.1. The food supply of those who live near the ocean, or who are within easy transportation distance from it, naturally comes to quite an extent from this source.

A study of these statistics leads, therefore, to the hypothesis that in some way, either from the food or water used, the inhabitants of the marine districts, as compared with those living in the interior, show less liability to suffer from diseases of the prostate or that the growth of the gland may be retarded.

Is it not possible that some element or substance in sea water, be it iodine, bromine, fluorine, or some rare compound, which is absorbed by the marine fauna, which are used as food for man,

may be this inhibiting substance? It would not be safe to cast aside such a suggestion when we consider, for instance, the infinitely small quantities of certain vitamins, of which we do not yet even known the composition, that have the power to modify the growth and change metabolism in the human body. The function of several of the glands of the body is not yet fully understood, and there is much to be learned in regard to the action of diet on the human body, so with these two "variables" the problem becomes still more intricate.

———R———

Report of Staff Meeting

R. McE. Schauffler, M.D., Kansas City

Research Hospital, May 8, 1930

The total number of deaths in the hospital in April was 17. Autopsies were obtained on 11 of the cases. The following were especially selected for discussion:

1. A case on the service of Dr. Walter Holbrook in which death followed a clean abdominal operation which was found post-mortem to be a gas bacillus infection of a most unusual type. The patient, a male 39 years old, had just completed an examination in the Diagnostic Clinic. He had complained of stomach trouble for years and had occasionally had severe pain at the end of the sternum or under the right rib margin or in the right scapula. He had never been jaundiced. Because of the repeated failure of the gall bladder to visualize, the diagnosis of gall bladder disease was made and operation advised. The operation was performed by Dr. Holbrook, the appendix removed and the gall bladder cleaned out of tarry material and small stones and drained. On the day after operation the patient had a rapid pulse and temperature of 102.6° and was restless and complained much of pain. The morning of the second post operative day a hard, red, tender area was noted in the right groin. This was soon followed by swelling along the spermatic cords, in the scrotum and in the left groin with tenderness in the left abdominal wall. The general condition of the patient was alarming. Late in the second day a black area appeared in the scrotum. No crepitation was noted. The abdominal incision did not open and there was no odor noticed. The patient died sixty hours after operation.

Autopsy report by Dr. E. T. Johnson. When the sutures were cut in the surgical incision the wound gaped open and considerable fluid of a raspberry juice appearance came out under some pressure. There was a moderate degree of general peritonitis. The gall bladder tube was firmly in place and the appendix suture seemed firm, although there was infiltration of the tissues about. There was much infiltration in the inguinal canals and scrotum. Smears show gas bacillus organisms and colon bacilli.

The case was discussed by Drs. Holbrook, Johnson and others. The concensus of opinion was that the infecting organism was in the appendix stump and began to grow in the crushed area at the site of ligation, spreading under the peritoneum and also into the abdominal cavity.

Dr. E. F. Robinson reported a case of tetanus after a clean appendix operation. He had looked up the literature and found that a number of such cases had been reported and that Dr. Matas of New Orleans had adopted a rule of having patients in the hospital several days on a diet of cooked food in order to lessen the danger of tetanus following rectal operation.

Dr. R. M. Schauffler reported a case of the more common type of gas bacillus infection which had recently occurred in his service at the General Hospital. The patient had suffered a comminuted T fracture of the lower femur with a small puncture through the skin. At the end of 36 hours the patient's condition became alarming with swelling and crepitation in the lower thigh. There was a very foul odor. The lower thigh and knee were opened very freely and the antitoxin given. In 48 hours it was necessary to make openings higher in the thigh. At this time a long aspirating needle was connected by stout tubing with a tank of oxygen and the tissues in all directions were extensively infiltrated with oxygen.

After making due allowance for good luck, Dr. Schauffler was inclined to credit the recovery of his patient to the creation of an extensive oxygen emphysema in addition to the usual treatment.

2. The case of a 2 year old child who had died from ischio-rectal abscess was presented by Dr. H. C. Berger. The child had had a temperature of 104° or more for eleven days with no other symptoms except frequent foul watery stools. These improved under treatment, but the fever continued. On the 12th day a hard mass appeared in the left buttock. This became larger and softer and was incised on the 14th day and much pus evacuated. The child died suddenly four hours later with symptoms suggestive of embolism.

The autopsy report by Dr. Johnson showed free thin pus exudate in the peritoneal cavity. Exploration of the abscess cavity from below showed that it had no connection with the rectum, but led upward to the right and in front of the uterus and behind the bladder close to, but not through, the peritoneum. Serial section showed infiltration of round cells all through this partition, but nothing to show which way infection had passed. Cultures from the abscess showed streptococci. Post mortem cultures from the peritoneum and the blood also showed streptococci.

In the discussion that followed opinion was divided as to whether this was an ideopathic streptococcus peritonitis or a migration from the bowel or a passing of infection upward from the abscess.

3. Dr. L. S. Milne presented a case of death from kidney stone and pyelonephritis. The patient was a male, age 56 years. The striking feature of the case was that all the patient's complaints were referred to the gastro-intestinal tract. For six months he had been complaining of digestive disturbance and for two months had been vomiting frequently, at times vomiting blood. He entered the hospital with a tentative diagnosis of carcinoma of the stomach. He had achlorhydria, but the x-ray examination was not convincing for carcinoma, although there was delayed emptying. As soon as the laboratory reports were in, the kidney trouble was obvious, as there were many pus and blood cells in the urine and the non protein nitrogen was 120.

The patient died three days after admission.

The important findings at autopsy were impacted stone in the righ ureter with hydro-ureter and hydro-nephrosis and several staghorn stones in the left kidney with multiple abscesses.

The discussion by Dr. Milne, Dr. W. A. Myers and others centered on the occurence and cause of vomiting as a prominent symptom in some cases of kidney or ureteral stone and other kidney lesions. A case was recounted where a patient had frequent headache with severe vomiting for several years. These were considered to be migraine, but after the discovery and removal of a ureteral stone, the headaches disappeared. Several other cases of kidney stones were referred to where the gastric symptoms had been prominent. The impression was that these could not all be accounted for by uremia, or at least not by the severe disturbance to which this name is usually applied, but that there might be mechanical or reflex causes of vomiting from intermittent ureteral obstruction.

4. A very puzzling case was next presented by Dr. Franklin E. Murphy. The patient, a woman of 37 years, had been admitted to the hospital April 16, and died a week later. In early January she had had three teeth extracted. About a week later a general arthritis developed with fever. Most of the larger joints were affected, with remissions and exacerbations. The patient also developed an acute nephritis. The joint symptoms had subsided a week before her admission, but fever continued and she had occasional attacks of pain and vomiting suggestive of gall bladder disease. On admission the urine showed a light cloud of albumin and was loaded with red and white blood cells. She ran a typical septic temperature. The physical examination was largely negative. A tender cervical gland about the size of a hickory nut was noted below the angle of the jaw and slight enlargement of other cervical glands.

Blood cultures taken on the first three days in the hospital were negative. Those taken on the following days were positive, but some only on sub-culture, so that a positive diagnosis of staphylococcus aureus bacteraemia was only made a few hours before her death.

Autopsy report by Dr. Johnson. The gross examination of all the viscera showed no major lesions except incipient pneumonia with a suggestion of thrombi in small vessels of the lung and tiny foci in the kidney which appeared to be septic emboli. Exploration of the neck showed a partly necrotic lymph node with a small abscess adjacent. In the neighborhood were found medium sized blood vessels somewhat remotely placed from the necrotic infected gland presenting a lumen more or less completely filled by thrombus laden with bacteria.

Dr. F. C. Narr called attention to the similarity of this case to one recently studied where death had followed a tonsil operation. Septic thrombi were found in the adjacent small vessels of the neck. Some of these were loosely clotted and loaded with bacteria and it seemed probable others had been washed into the blood stream and carried to the lungs, where there were recognizable emboli and that bacterial emboli had gone on to other tissues.

In the general discussion of Dr. Murphy's case by Drs. E. F. Robinson, Kerwin Kinard and others, special attention was called to the increase in the number of fatal cases of sepsis following extraction of teeth, which appeared in the casualty reports of Research Hospital in the last few years. It was contended that the extensive curetting of the teeth socket and adjacent bone was bad surgical practice. The custom of curetting and then suturing the gum was condemned. It was considered that the substitution of local anesthetics for gas in extractions might be undesirable, but the main criticism was against the practice of dental surgeons of vigorously stirring up a septic area and thus opening new portals to infection.

The report of a clinical case from the hospital was made by Dr. Lindsay S. Milne:

The patient, a woman 46 yrs. old, was admitted April 5, 1930. Fifteen days before she had a sore throat, two days later onset of otitis media. Drum puncture was done on the following day with great relief. A day later, eleven days before admission, she developed facial erysipelas; the first redness being noted at the tip of the nose and spreading over the face. She was treated with moist packs and the specific serum. Two days later she developed marked edema of the left lower limb with slight thigh tenderness, apparently a phlebitis. The erysipelas had entirely disappeared on admission to the hospital and the edema of the lower leg was less. The patient was running a septic temperature.

Blood culture was negative. Physical examination was negative for any lesion of heart, lungs or other viscera. The hemoglobin was 40 per cent, R. B. C. 2,900,000, W. B. C. 11,000.

In the absence of any other findings Dr. Milne suspected that the veins in the leg might be filled with pus. He said that septic thrombosis after erysipelas was especially prone to softening and recounted a case with severe sepsis and no local findings except edema and slight tenderness in which needle punctures showed pus the whole length of the long saphenous vein and in other superficial veins and a large number of small incisions resulted in the recovery of the patient. Dr. Milne made several needle punctures of veins in the case under discussion, but found no pus.

After three weeks in the hospital there was no change in the temperature course or the physical examination except that the patient had great tenderness about the knee and could not bear to have the limb moved. Suppurative arthritis of the knee was suspected, but there was so little increase of fluid within the joint that the diagnosis was too doubtful to justify operation. The whole thigh was enlarged, but there was no hard swelling anywhere and no fluctuation could be made out.

x-Ray continued negative for any bone lesion. Four days later a needle was introduced deep in the anterior aspect of the thigh above the middle and pus

withdrawn. Incision was made under local. After division of the deep fascia scissors were carried through the quadriceps and opened and a large amount of pus escaped. At operation a few days later pus was discovered in a large flat layer which included all of the anterior and inner thigh, the inner side of the knee, the popliteal space and the upper third of the calf.

Dr. Schauffler recalled a similar case in which the acute onset was two weeks after a confinement from which the patient had apparently recovered completely. Bacteraemia was suspected but blood cultures were negative. Then septic phlebitis with only slight circulatory obstruction was suspected and later periostitis or osteomyelitis, on account of thigh pain. The septic temperature continued and all examinations were negative. After a month a tender swelling appeared over the knee. Superficial puncture showed pus and septic arthritis was diagnosed. Dr. Schauffler was called to open the knee, but instead made an exploratory incision in mid-thigh and found a condition similar to that reported in Dr. Milne's case.

Dr. Schauffler called attention to the fact that the pus in these deep thigh abscesses finally worked down about the knee, here coming close to the surface. He felt that with his experience he ought to have urged exploratory punctures in Dr. Milne's case as soon as he was called in consultation. He felt that in a hospital like the Research where repeated blood cultures almost always gave positive findings in subacute bacterial endocarditis and in bacteraemia from any cause, that with negative cultures and symptoms of some trouble in the thigh early exploration of the veins and of the deep tissue planes should be made.

———R———

Eye Injuries

L. A. Latimer, M.D., Alexander, Kan.

Read before the Rush-Ness County Society, Nov. 25, 1930.

Eye injury in general practice is an emergency which calls into action the resourcefulness of the physician consulted, who must act with great promptness and decision.

According to Stanford one-twelfth of all injuries are to the eye, and one-tenth of all blind people lose their sight by accident. Thus it can readily be seen that the care of an injury to the eye is one of the important acts of the general practitioner.

Injuries to the eye may be classified as penetrating and non-penetrating. Even very slight injuries to the cornea may cause a severe inflammation with resulting iritis, iridocyclitis, ophthalmitis and loss of the eye.

Most inflammations of the eye are caused by the introduction of micro-organisms therein, the virulence of the inflammation depending upon the site of the injury and the number and virulence of the bacteria. Pneumococci and streptococci produce a very severe reaction.

A patient presenting himself with an inflamed eye should be placed in a position where a good light may be thrown into the eye, and it should be carefully examined for small abrasions of the cornea, or for small foreign bodies imbedded therein. Only a very slight injury may show upon the cornea and still it may be a perforating wound. Attention should be paid to the following signs in looking for perforation of the eye ball. The pupil is irregular or pear shaped in outline, the anterior chamber is empty, the iris is usually prolapsed through the wound in the cornea. A slight prolapse of the iris may be difficult to see, however, if the pupil is pear shaped it is a sure sign the iris is caught in the opening wound of the cornea. Even in perforating wounds of the eye if no infection appears and the lens is not injured good vision may be retained. The location of the injury is very important, as injuries to the sclera in the region of the ciliary body are extremely dangerous, for even many years later you may have a detachment of the retina and blindness. This condition is caused by the formation of fine connective tissue and the contraction of this scar tissue pulls the retina away from the choroid. Perforation may be into the anterior chamber only and infection limited to this region, or the vitreous may also be infected. If the anterior chamber

only is infected a purulent iritis with hypopyon and greenish discoloration of the iris follows. Owing to its absence of blood vessels the lens and vitreous offer a good nutrient medium for bacteria. If the vitreous becomes infected there will be no immediate appearance of inflammation, for the reason that the toxic substance cannot act directly upon the blood vessels and it is only when toxins have diffused through the vitreous and act on the membrane that the inflammation starts. Thus one should bear in mind that an injured eye may be in a dangerous condition even though it show no immediate signs of inflammation. If in place of a jet black pupil a grey reflex is seen a diagnosis of traumatic cataract can be made. In these circumstances the eye is in a serious condition and a great deal depends upon the first aid treatment given. Be careful not to handle the eye unnecessarily, do not use strong irritating antiseptics. A 10 per cent to 15 per cent solution of neo-silvol should be freely used. If the iris is prolapsed toward the center of the cornea a 1 per cent solution of atropine should be instilled. However, if the prolapse is at the periphery of the cornea a 1 per cent solution of eserine should be used. The object is to replace the iris into the anterior chamber by pulling it free from the margins of the wound. Do not try to excise the prolapsed iris unless you are especially prepared to do so as the operation is not as easy as it looks and great harm may be done.

When the eye ball has not been perforated observe the following signs: The anterior chamber is full, the tension is normal, the pupil is circular and responds to stimulus of light. In this case instill neo-silvol and apply a compress bandage. In these cases the injury to the cornea is usually extensive and deep and there is considerable danger of defective vision due to opacity of the cornea. The most serious danger, however, in this class of cases is from sepsis. Rest is essential to the smooth healing of all injuries, and as atropine is the physiological splint it is a wise procedure to instill a 1 per cent solution after using neo-silvol. The timely use of atropine is our best preventive treatment of iritis with all of its serious complications. Atropine, however, is a drug which should be used with great care, and one should make sure there is no glaucoma present before instilling atropine. Gently test the pressure of each eye ball with the palpating fingers upon the closed lids, and if the inflamed eye seems hard it would be well to postpone atropine until glaucoma could be definitely excluded, otherwise disastrous results may be obtained.

After all the important thing in the emergency treatment of the eye is toward preventing infection. Many an otherwise simple case of foreign body or slight abrasion of the cornea has become a serious ulceration of the cornea with its resulting iridocyclitis, hypopyon and ophthalmitis simply by inattention to little details which might have prevented infection.

A 2 per cent solution of butyn for pain, attention that all instruments used are sterile, cleaning the hands as carefully as for a surgical operation, the timely use of neo-silvol and mercurochrome, and the placing of a sterile gauze dressing on the eye to prevent the patient from wiping the eye with a soiled handkerchief, will prevent a large part of the serious complications of eye injuries, and help to decrease the percentage of blindness from accidental injuries to the eye.

———R———

TUBERCULOSIS ABSTRACTS

The literature on lung abscess, dating back to Hippocrates' times, abounds in contradictions and discouragements. In most cases of lung abscess, the etiology is difficult to trace, the symptoms and physical signs are misleading, the prognosis is pessimistic, and the treatment is unsatisfactory. Surgical measures have not, in general, proved to be a boon. However, the results of 35 cases of nontuberculous abscesses of all kinds, observed by H. I. Spector of St. Louis, warrant a more optimistic outlook and sustain the value of conservative, harmless, medical regimen. Abstracts of Dr. Spector's paper follow.

LUNG ABSCESSES

Early literature emphasized pneumonia as the cause of lung abscesses. Only recently has it become recognized that lung abscesses are a rare sequel of lobar pneumonia, occasionally follow bronchopneumonia, and most often follow operations of the upper respiratory tract. Some observers believe that abscesses may be primary and may, in fact, be preceded by a primary stage of pneumonia.

ETIOLOGY

Whether the causative organisms gain entrance into the lung by aspiration or through the blood by means of an embolus is under dispute. Perhaps a combination of the two processes will explain certain obscure cases. Chronic infections in the upper respiratory tract and the retention in the lungs of certain anerobes ordinarily found in the mouth play a role in etiology. Experimentally anything that tends to abolish the cough reflex in anesthesia, or to increase the cough after anesthesia, seems to favor the production of abscesses.

TYPES

Lung abscesses may be acute or chronic; single, bilateral, or multiple; and may be situated in the hilar region, in the center, or the periphery of the lung. Lower lobes seem to be more frequently involved than upper, and the right more frequently than the left lung.

SYMPTOMS

Obviously, a disease of such variable etiology and pathology will manifest a multiplicity of symptoms. Chills, pain in the chest, dry paroxysmal cough followed later by profuse expectoration of foul odor are common. A septic temperature, rapid pulse, and high leucocyte count are usually present. Night sweats, loss of weight, and hemoptysis are a part of the clinical course. Clubbing of the fingers is usually seen in chronic cases. Elastic tissue in the sputum is not common.

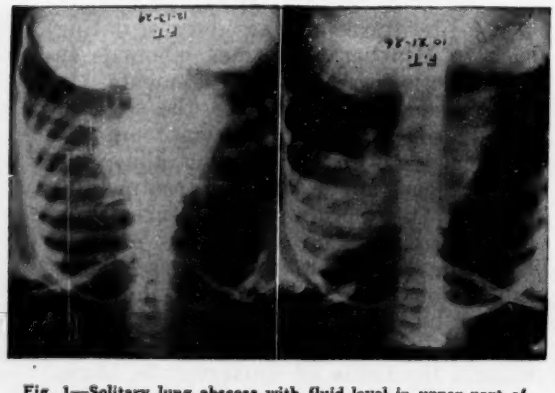


Fig. 1—Solitary lung abscess with fluid level in upper part of right upper lobe.
Fig. 2.—Same case about three years later. Evidence of abscess absent; patient in good health, attending school.

PHYSICAL SIGNS

The physical findings depend upon the location and size of the abscess and on whether or not rupture has occurred. Centrally placed abscesses present few signs; peripheral ones, if large enough, may give rise to scattered, fine or medium rales. After rupture, signs of cavitation, such as bronchial breathing, medium and coarse rales, and whispering pectoriloquy may be elicited. Generally speaking, the symptoms are out of proportion to the physical changes, the most constant of which is dullness on percussion and a diminution of breath sounds.

A detailed history as to etiology and mode of onset is important. After rupture of the abscess, the diagnosis is relatively simple. Multiple abscesses too often remain unrecognized until after autopsy.

The roentgenogram is indispensable. In the early stage, the abscess is frequently seen as an acute, irregular consolidation, not characteristic in appearance, and may resemble a pneumonic tuberculous consolidation, interlobar empyema, or a new growth. After rupture, if the cavity is partially filled with secretion, a fluid level with a rarefied area above may be seen. If completely filled, one cannot distinguish between the infiltration and the fluid. An extensive zone of congestion may surround the abscess.

PROGNOSIS

Early diagnosis offers a more favorable prognosis. The prognosis will depend upon the cause, the type, the location, and the duration of the abscess. Those following inhalation of foreign bodies have a good prognosis. Solitary abscesses offer more encouragement than multiple, and apical and hilar ab-

scesses have a better outlook than central or peripheral ones; acute abscesses are more hopeful than the chronic. The character of the treatment, of course, definitely influences the prognosis.

TREATMENT

Until recently, surgery has occupied a prominent place in the treatment of lung abscess. The results obtained by medical treatment were disheartening; mortality ranging from 60 per cent to 100 per cent has been reported by good observers. More satisfactory results of medical treatment recently reported have simulated a renewed interest, and the pendulum seems to be swinging toward conservatism; though radical surgery in modified form still occupies a prominent place. Bed rest, diet, and postural drainage are used by many surgeons as a preliminary measure to radical treatment. Artificial pneumothorax, vaccine and drug therapy also have their advocates.

The author's treatment in 35 cases consisted of complete bed rest during the acute stage, postural drainage several times a day (frequency and length of time depending on the patient's tolerance), and a soft but nourishing diet. Patients were encouraged to expectorate. Pneumothorax was attempted if improvement did not take place within a reasonable length of time. Radical surgery was resorted to in one case in which pneumothorax had failed. Bronchoscopy, transfusions, and arsphenamine were used twice each in different cases and as a last measure in hopeless cases.

After subsidence of acute symptoms, the patients were discharged but continued treatment at home and reported for observation at the out-patient clinic. Prolonged bed rest was stressed. In fact, lung abscess cases are treated like active, and later quiescent, cases of tuberculosis, and patients are not permitted to return to work until evidences of pathologic changes can no longer be revealed.

With the exception of one patient who could not be traced, all of the cured patients have remained well. Four of the improved patients could not be found and these failed to co-operate.

An analysis of the results indicates that the prognosis is much better in solitary than in multiple abscesses, since 89.6 per cent of the former were either improved or cured, while 100 per cent of the latter had a fatal ending.

SUMMARY OF CONCLUSIONS

Among the conclusions are:

All acute lung abscesses are primarily medical, a contention supported not only by the results quoted but also by the statements of other authors that operation during the acute phase of abscess carries with it a mortality of from 65 to 70 per cent.

Acute single lung abscesses and some chronic abscesses are usually amenable to medical treatment alone.

Radical surgery is definitely indicated only in cases in which the patient does not get well after a reasonable period of conservative "management," in peripheral abscesses that do not drain well, in long standing chronic cases, or, occasionally, in multiple abscesses limited to one lobe.—*Lung Abscesses, H. E. Spector, Jour. of the A.M.A., Sept.* 13, 1930.

———℞———

Possible Death from Drinking Ethylene

Methods of Favoring Bile Drainage

Proprietary mixtures containing phenolphthalein, acid sodium oleate, salicylic acid and menthol had much vogue some years ago. This was an attempt to combine the experimentally demonstrated stimulants to bile secretion (salicylic acid and menthol) with the bile expelling effect of fatty acid (quantity probably entirely inadequate) and the laxative action of phenolphthalein. The Karlsbad treatment, consisting of the ingestion of hot alkaline laxative mineral waters, is another way of aiming at the same result, which has centuries of favorable experience in its favor. Either the natural or the artificial Karlsbad salt (N.F.) may be taken by the teaspoonful to a tumblerful of hot water half an hour before the larger meals. (J.A.M.A., June 7, '30.)

———℞———

Insanity is said to be decreasing. Maybe it's because so many things that used to be considered crazy aren't any more.—Arkansas Gazette.

THE JOURNAL
of the
Kansas Medical Society

W. E. McVEY, M. D. - - - Editor

ASSOCIATE EDITORS—L. W. SHANNON, L. B. SPAKE, P. S. MITCHELL, O. P. DAVIS, J. T. AXTELL, J. F. GSELL, C. C. STILLMAN, ALFRED O'DONNELL, H. O. HARDESTY, I. B. PARKER, C. H. EWING, W. F. FEE.

Subscription Rates: $2.00 per year. 20c single copy. Advertising rates furnished promptly on application.

LIST OF OFFICERS—President, E. S. Edgerton, Wichita; President-elect, E. C. Duncan, Fredonia; Vice President, J. B. Carter, Wilson; Secretary, J. F. Hassig, Kansas City; Treasurer, Geo. M. Gray, Kansas City.

COUNCILORS—First District, L. W. Shannon, Hiawatha; Second District, L. B. Spake, Kansas City; Third District, P. S. Mitchell, Iola; Fourth District, O. P. Davis, Topeka; Fifth District, J. T. Axtell, Newton; Sixth District, J. F. Gsell, Wichita; Seventh District, C. C. Stillman, Morganville Eight;h District, Alfred O'Donnell, Ellsworth; Ninth District, H. O. Hardesty, Jennings; Tenth District, I. B. Parker, Hill City; Eleventh District, C. H. Ewing, Larned; Twelfth District, W. F. Fee, Meade.

LEGISLATIVE POSSIBILITIES

It is almost certain that an effort will be made during the coming session of the legislature to repeal the laws regulating the practice of medicine. That the legislature will contain a number of unfriends of the medical profession is certain and that such unfriends will support such a bill is to be expected. They believe that the repeal of these laws would be in the nature of retaliation upon the doctors for their efforts to enforce them.

Our legislators and the people generally have always regarded the medical practice act as a concession to us. That explains the exemption clauses that have been inserted and the various special laws that have been passed. These exemptions and special laws have made the medical practice act practically ineffective for the purpose it was originally intended to serve. Its original purpose was to guarantee the educational qualifications and scientific proficiency of all those permitted to practice the healing art in this state.

Apparently there are a great many people in the state who do not want such guarantees and who resent this effort on the part of the state to protect them against incompetent practitioners. There have always been a few people of that type in every community, but such a large number as the recent epidemic of "poll-evil" indicates cannot be ignored.

If the people want these laws repealed what should we do about it or what can we do about it?

The altruism of the medical profession is usually misunderstood or misinterpreted, any of its efforts that suggest paternalism are resented, but its charity is received as if it were activated by an insatiable obligation. So long as this attitude of the people toward the medical profession holds, any militant program is destined to fail. And militancy is quite out of harmony with the art of healing even if a program of that sort promised a favorable outcome.

We as a profession are lacking in political sense, our thoughts and efforts have been directed to the discovery of facts instead of their concealment, and our normal inclinations are toward the promotion of peace and happiness rather than strife. We do not know how to secure the passage of desirable laws or the defeat of undesirable laws, nor how to manipulate the enforcement of laws for our own comfort or profit. Under the circumstances it may be wise for us to devote all our efforts to the prevention and cure of disease and leave the making of laws and the enforcement of laws to the politicians and their henchmen.

There are quite a few of the members of this Society who feel that way about it and there are a great many people who agree with them. It is rather surprising how many people there are who still think that preachers and doctors have no business meddling in politics. Possibly they wish to preserve in purity

those to whom they entrust the care of their bodies as well as those to whom they entrust the care of their souls, and fear they might become contaminated by too intimate associations with politicians.

Considering the importance and unimportance of our extremely few successful ventures into politics there is really no justification for antagonizing these friendly sentiments of the people.

There is another side to this picture, however. While the medical profession has never been credited with a high degree of political sense it has by honest and persistent effort accomplished something by which the people have been greatly benefited.

For nearly twenty years the Kansas Medical Society "memorialized" each successive legislature with pleas for the creation of a board of health and the promulgation of necessary health regulations and finally in 1885 the board was created. With the same sort of persistence it continued for more than thirty years its efforts to establish a standard of qualifications for practitioners of the healing art, until the adoption of our medical practice act in 1901.

Among the members of the Society in those early days were a few statesmen of acknowledged ability and some aggressive politicians with considerable following, but it was not by the influence of these men that the adoption of those laws was brought about. In fact it was not until the people had learned from the experience of other states and had been taught something of the principles of disease prevention that they were willing to submit their destinies to a legally constituted and cautiously empowered health department.

There are some who will remember the persistent but futile efforts of the State Society to secure some satisfactory medical legislation during the latter part of the nineteenth century and these will recall the conditions which existed during the two years preceding the session of the legislature of 1901. Ignorant and incompetent practitioners of every description then in existence had swarmed into the state, but in addition to these there were men traveling about the country claiming to represent prominent and well known surgeons and physicians in Kansas City, St. Joseph and Topeka. They would ascertain the names and addresses of people with chronic ailments, call on them, make pretented diagnoses, guarantee to cure them, secure a note which they could readily cash at the local bank, and they would be heard from no more. It was the complaints of the victims and friends of the victims of these unprincipled crooks, and the demands made upon their representatives in the legislature that was responsible for the passage of the medical practice act by the legislature in 1901.

Under these circumstances it would be extremely humiliating to the medical profession to have this law repealed, and it would also be more discouraging than were the oft repeated failures. However, there is some reason to think that the people are not dissatisfied with the law itself but with the method provided for its administration. For instance, the people would probably approve of the revocation of a license on account of gross immorality or unprofessional conduct, but resent such action when charges are brought by one group of doctors and the evidence heard and the decision made by another group of doctors. At least that was the burden of the criticisms made during and after the hearing of the Brinkley matter.

It was believed at the time the medical practice act was drafted that a test of qualifications to practice the healing art

could only be made by qualified physicians, and a board composed of physicians was created for that purpose. Out of this has grown the charges of jealousy and unfairness and all the other antagonistic sentiments against the Kansas Medical Society and the regular profession in the state. The fact that this law intended to regulate the practice of medicine was placed entirely in the hands of those to be regulated don't appeal to the average individual as evidence of altruism in those who sponsored it.

If this is a fair interpretation of the sentiment of the people it might be well for us to support the bill which, it has been reported, will be introduced, providing for the abolishing of all the examining boards and the transfer of their duties to the board of health or to a commissioner of health.

As stated above, the purpose of the medical practice act was to protect the people against unqualified practitioners of the healing art, but it has been rendered incompetent for that purpose. Because of the special laws that have been enacted and because of the difficulties in law enforcement, a license to practice the healing art in this state offers no guarantee of the holders qualifications. The people still have the privilege, for which they seem to hanker, of employing crooks, charlatans or ignoramuses if and when they wish.

But for those people who are more concerned and more particular about the quality of service their ailing bodies receive there still remains the only reliable guide to properly trained physicians —the roster of members of the Kansas Medical Society.

For seventy years this society has been the censor of scientific ability and professional integrity of the practitioners in this state. With the years it has grown in strength and in influence, and so long as the interests of political parties have first consideration in the adoption and enforcement of laws, membership in this society will give the people a better guarantee of competency than any regulatory legislation that has been or is likely to be enacted.

For this reason and for other reasons which have frequently been discussed in these columns our efforts should be directed toward the perfection of our organization. Membership in this society should be one of the most valuable assets a practitioner in this state can own. It should be worth more to him than membership in any other organization of any kind.

The better class of people do realize the importance attached to that sort of recommendation. They are suspicious of a doctor who is refused admission to his county medical society and this attitude should be encouraged and strengthened by strict adherence to the requirements for admission and more profound respect for the principles of ethics by those who are members.

THE NURSE PROBLEM

There is a real problem in connection with the examination and registration of nurses. There has been in previous sessions of the legislature and there will probably be in this one an effort to repeal the nurses registration law. Naturally the members of our Society are largely concerned in the training of nurses and from such information as is available opinions are divided as to what changes, if any, should be made in the present law.

One of the objections to the present law is that it gives too much authority to the board of examiners and that this has resulted in arbitrary requirements

which the small hospital training schools are unable to comply with. It is claimed that these small hospitals render a very important and necessary service to the communities in which they are located, and that it would be impossible to operate these hospitals without a training school. It has been suggested that some change be made in the law which would establish a minimum standard for training schools and which would relieve the board of the responsibility of changing those standards at will.

Another line of complaint has its foundation in the standard of fees prescribed for registered nurses. It is claimed that the people, or at least a great majority of them, cannot afford to pay the fees demanded. One of our correspondents writes that the physicians in his county are depending entirely on practical nurses and are very well satisfied. It is claimed by some that the registration law has enabled the nurses to set up a universal fee bill which imposes an impossible burden upon the people.

The rapid evolution of the highly technical nurses training schools to be found in the larger hospitals has brought about a situation not unlike that which resulted in the elimination of all the small medical schools some years ago. It is just as impossible to give the requisite training course in the small hospital as it was to give the requisite clinical training in the small medical school. But the problem is not so easily solved as was that of the medical schools. The small medical school was not a necessity to the community and rendered no service that could not be dispensed with or derived from some other source. But the small hospitals may not be disposed of so easily, they serve a real purpose for which there is no substitute except in another hospital.

The evolution of the training school has brought about another condition which further complicates the problem. While the training school is an economic feature in a small hospital it is a considerable burden to the large ones. The added cost of the training school must ultimately be charged to the patrons of the hospital, which suggests that in the final analysis nurses training schools will be either endowed institutions or supported by the state. That, however, does not solve the problem of the small hospital which just at this time is demanding consideration by the medical profession and the legislature. Under the present conditions it would probably be wise to make some concessions to these hospitals even though in so doing some sacrifice of ideals in nurses training results.

The situation is one which requires very thoughtful consideration. None of us would consider advisable any plan that would tend to lower the efficiency of our hospitals by the admission to their staffs of unqualified practitioners, for the same reasons we cannot consider any plan which tends to lower the standing of our training schools upon which the efficiency of the hospitals also depends.

The problem which now presents itself might have been anticipated, for the educational program for nurses as so far developed is utterly impossible with the facilities for instruction now available. The problem is therefore not primarily a legislative one but has become so because of the complications arising from an effort to accomplish the impossible. One who hopes to solve the problem by any legislative procedure is certainly doomed to disappointment. But it can be solved by the co-operative efforts of the hospitals and the nurses association.

This subject has been discussed in these columns at various times in the past few years and it may not be out of

place to repeat some of the suggestions that have been made. But first; let it be granted for the sake of argument, that the contention of the nurses association is correct and that adequate training cannot be given in small hospitals; let it also be admitted that the training school is a financial burden in a large hospital, but efficient nursing service is necessary for the proper conduct of both classes of hospitals.

Let there be established departments of nursing education in the University and the Agricultural College and such other colleges in the state as may care to take on the work. In these departments will be given a nine months intensive course of didactic instruction covering the subjects now taught in the best training schools. Those who successfully complete this didactic course will then be entered for practical instruction in the larger hospitals in the state for one year, and then they will be distributed for service and further clinical instruction in the small hospitals where they will also serve for one year, and after that a diploma may be issued or they may be examined by the board or other authorities for registration or both if desired.

By this plan a uniform and adequate educational program may be carried out, the small hospital will have the services of nurses already well trained and the financial burden will be removed from the large hospitals. With no study hours and no class hours to interfere with the routine duties the larger hospitals should be able to do with one-third the number of nurses now required.

This plan should be feasible and should develop into a very efficient training system, but unfortunately it does not solve another feature of the problem which during the present economic crisis has become greatly magnified. It seems imperative, under present conditions at least, that the cost of hospital care should be reduced. The plan proposed should permit some reduction in hospital fees, but that does not go quite far enough. Much of the heavy cost of hospital care is occasioned by the employment of special nurses. In a large proportion of the cases requiring one or more special nurses it is not special skill that is required but constant attention, and in such instances the hospital should be able to supply the required nurses from its own staff at a very considerable reduction in the fees now charged.

It seems that the problem can be solved by some plan such as suggested in so far as the hospitals and the nurses association are concerned, but there still remains the demands of the people and many of our profession for a less expensive nursing service outside of the hospitals.

As in the hospitals a majority of the patients need constant service rather than skilled service and resent the necessity of paying for what they do not require. At any rate, that is the way the case is presented, and since it is presented with considerable backing it must be given fair consideration. If a supply of less efficient and less expensive nurses is required to meet this demand how shall they be supplied?

Under the present training school system it is within the suspected sequence of events that the small hospitals will be required to send their pupils to large hospitals for supplemental training or that their graduates will be put in a class by themselves as of inferior quality. This would destroy, in the eyes of the people at least, the reputed efficiency of these hospitals and must not be permitted under any circumstances.

Under the plan suggested above a sup-

ply of incompletely trained nurses can be provided by permitting the withdrawal at the end of the first hospital year of any pupils who wish to become practical nurses and by dismissing the less promising students with the same privilege.

AN IMPORTANT DECISION

An opinion was recently handed down by the Kansas Supreme Court which should be of considerable interest to the doctors in this state, especially those who care for corporation employees who are under the workmen's compensation laws.

The case referred to was brought by Dr. E. B. Ross of Wichita against the Austin Drilling Company and the following is quoted from the syllabus of the Court:

1. Physicians and surgeons do not operate under the workmen's compensation act, and in making reasonable charges for their services they are not bound by the provisions of that act which limit the liability of an employer to a maximum of $200 which he may be required to pay as a part of compensation for medical, surgical and hospital treatment of his injured employee.

2. The general rule that where one stands in no relation to a patient which imports a legal obligation to provide for him calls a physician to treat him, the mere request does not import an obligation to pay for the services, is not applicable to an employer under the workmen's compensation act who calls and directs a physician to treat his injured employee when such employer is under obligation to render treatment to a stated amount, and treatment of a value in excess of that amount may inure to the financial advantage of the employer.

3. On the record before us it is held that the evidence is sufficient to go to the jury on the question of whether there was an express contract to pay for reasonable services, or such contract was implied from what was said in view of all the surrounding circumstances.

CHIPS

Compere reports his observations in the treatment of rickets, *American Journal Diseases of Children,* November, and suggests a preference for a combination of phosphorus and cod-liver oil in the treatment of this condition. In all of the cases there was prompt healing with marked calcification and increased density of all the bones studied by means of the Roentgen rays.

Resuscitation of the stopped heart by intracardiac therapy is not only successfully practiced but is indicated in every case of death that occurs as the result of the asystolic heart is the opinion of Hyman expressed in a discussion of this subject in the October number of the *Archives of Internal Medicine.* He states that the success of the intracardiac injection procedure is apparently due more to the effect of the puncture wound made in the wall of the heart than to the chemical substance injected. The myocardium of the normal asystolic heart rapidly becomes irritable with the onset of anoxemia and in this condition various kinds of mechanical stimulation may cause contraction. The puncture is a focus of increased irritability from which a stimulus for myocardial contraction may be developed. The first contractions are extra-systoles but the extra systolic rhythm may be replaced by a normal sinus rhythm, or if the anoxemia has been much prolonged the extra systolic rhythm may persist and be followed by ventricular fibrillation and death. Because of the observation that the auricles are more responsive to mechanical stimulation than the ventricles and because auricular extra-systoles are followed by normal ventricular contractions, the author recommends intra-auricular puncture instead of ventricular injections. The cases most favorable for resuscitation are those in which there is no general or cardiovascular disease. It is particularly recommended in deaths occurring on the operating table, those occurring from hemorrhage, shock, anesthesia. In status lymphaticus it may be used in connection with other measures.

Graves' disease is hoary with age, its cardinal symptoms have long been recognized and, at least in the majority of cases, its diagnosis is seldom questioned. In spite of the fact, however, that it is so frequently associated with hyperthyroidism and that thyroidectomy usually results in marked alleviation or entire relief of the symptoms that characterize the disease, the relation of the thyroid gland to Graves' disease is still a subject for much speculation. In an article appearing in the *Archives of Internal Medicine* for October, Moschowitz says: "One must conclude ,therefore, that despite the fact that many of the signs of Graves' disease are apparently the effects of hyperthyroidism, the gland itself is not the primary cause, and the changes that occur in the gland are the resultant factors." The facts upon which he basis this hypothesis are apparently no more numerous nor more conclusive than those upon which other similar opinions have been formed. The particular observation stressed in this article is that there is always a constitutional background for the development of Graves' disease. That this background may be determined by careful search of the personal and family history of the individual. He says: "The natural history of the disease extends over a long period. The earliest phase is that heretofore known as formes frustes, "basedowoid," automatic imbalance, etc.; the final stage is that conventionally termed Graves' disease, with the characteristic quadrad of signs—tremor, tachycardia, enlarged thyroid gland and exophthalmos." The transition from the early phase to the fully developed Graves' disease "is usually traceable to a psychic insult which is in the nature of a surprise." He thinks there is no doubt that the results of subtotal thyroidectomy are speedier and more lasting than those obtained by strictly medical means. However, he points out that all that is accomplished by this procedure is to depress rapidly the basal metabolism. There are recurrences because the constitutional factor remains and the possibility of similar reaction to the proper stimulus has not been removed by the surgeon.

That there is a specific remedy for pneumococcic pneumonias in the normal secretions of the body and that the specific element in such secretions may be used intravenously in the successful treatment of pneumonia may be reasonably anticipated from the report of Ziegler, in the October number of the *Archives of Internal Medicine,* on the effect of bile salts upon pneumococci. According to his observation lysis of pneumococci by bile salts takes place in serum although serum retards the action. Bile salts also cause a lysis of the blood cells, but they are five times more lytic for pneumococci than for blood cells. According to the observations reported, bile salts tend to terminate the course of pneumococcic pneumonias, they produce a mild anemia, they cause an increased output of bile and in certain concentrations damage the veins. The author suggests the improbability of success from endotherapy with bile salts since they would be absorbed in the intestine, taken to the liver through the portal system and excreted by the liver into the bile. The difficulty with the intravenous method lies in the damage to the veins which results from the injection of even a 1 per cent solution. An obliteration of the veins injected follows and while this causes no marked interference with the circulation it is a serious objection to that method. Further investigations are being made and no doubt some means will be found by which this irritation to the veins may be avoided. It is suggested that icterus in pneumococcus pneumonia is considered to be indicative of a protective mechanism and not of a toxic phenomenon. Attention is called to the fact that this is the first time bile salts have been used in the treatment of pneumonia alhough they have been used previously in the treatment of other pneumococcic infections.

It has always seemed a rational conclusion that the pain in peptic ulcer was caused by increased acidity. Recently there have been reports indicating that the injection of foreign proteins resulted

in relief of the pain in these cases and that this freedom from pain extended over considerable periods in some of the cases. A report of some recent studies by Meyer and Kartoon appeared in the November number of the *Archives of Internal Medicine*. Their observations were on eleven patients with peptic ulcer that had been definitely diagnosed. Frequently repeated tests for acidity were made and it was found that gastric acidity was decreased in five, unchanged in four and increased in one. In four in which acidity was reduced there was relief from pain, in one in which the acidity was reduced there was no relief from pain. In three cases there was no change in gastric acidity but the pain was relieved. In one case the acidity was increased but the pain was relieved for from twenty-four to forty-eight hours. These results seem inconsistent with the theory of pain due to acidity. They have evolved the hypothesis that pain from ulcer is associated with variations and disturbances in the blood supply in and about the ulcer. Pain is diminished by the ingestion of food which increases the general vascular supply of the stomach, particularly about the area of the ulcer, this increased vascular supply diminishes the tonus and spasm thus relieving the pain. The return of pain in from one-half to one hour after food is due to the increased vigor of peristaltic activity which depletes the vascular bed of the rugae of the stomach resulting in local asphyxia, edema, spasm and pain. The injection of foreign protein results in a lowering of vagus tonus and diminution of gastric tonus and gastric contractions and thus causes relief of pain.

The relation between diabetes and obesity suggests possible changes in the pancreas due to deposits of fat. The finding of a diminution of parenchymatous tissue in the fatty pancreas by Balo and the finding by Truehart of areas of necroses in the interstitial fat of a large number of fatty pancreases, has been supplemented by the findings of Hup who examined the carcases of a large number of fat swine. Necroses were found in a large per cent of these although none were found in the lean ones. He suggests a program of pathologic events beginning with the deposit of fat in the interlobular tissue, separation of the pancreatic lobules by adipose tissue, followed by pressure on the lobular ducts, stasis of secretion, and then ascending infection, focal parenchymatous necrosis, liberation of lipase and necrosis of fat. That these changes would result in diabetes seems a rational conclusion but the fact cannot be demonstrated in these animals because their lives are promptly terminated after they have reached that stage of obesity.

The importance of an accurate diagnosis in cases suspected of having tuberculosis is brought out very forcibly in a lecture recently delivered by Burrell before the Royal College of Physicians of London and published in the Lancet, November 22. He said: "Tuberculin may be of little value but it has at least brought out the fact that a large proportion of human beings is infected with tuberculosis. Yet only a few develop clinical tuberculosis. Since so many are infected and so few affected it follows that the majority of people keep well without any treatment at all. To submit anyone to a long course of unnecessary treatment is not only useless but may do untold harm. Many a healthy person has been frightened into invalidism by the threat of tuberculosis. Instead of following a normal career, the patient gives up business and devotes his life to health. He develops fads about food and clothing, cannot live in this or that climate, must winter out of England, is in a constant state of anxiety about his health and is never really happy. Bad as this is for an adult, it may be much worse for a child if taken away from school and companions of a like age at the most impressionable time of life. On the other hand, an active tuberculosis is very amenable to treatment in the early stages, but if neglected quickly gets out of control. It is, therefore, of the utmost importance to distinguish between the tuberculous and those who are out of sorts through some other cause."

In discussing the use of special tests he states that none of them is of any value except in a negative sense. He places a good deal of confidence in examination by *x*-rays if the interpretations are correctly made.

———R———

American Board of Obstetrics and Gynecology

The American Board of Obstetrics and Gynecology, composed of nine members and examiners, elected by The American Association of Obstetricians, Gynecologists, and Abdominal Surgeons, The American Gynecological Society, and the Section on Obstetrics, Gynecology, and Abdominal Surgery of The American Medical Association, was formally organized in Niagara Falls, September 16, 1930. The function of the Board is to grant certificates indicating proficiency and specialization in Obstetrics or Gynecology, or both, to those who comply with its requirements.

This board puts into action a determined effort on the part of these three national organizations to improve the standards of practice of obstetrics and gynecology. It expects to accomplish this by various activities, such as the investigation and encouragement of graduate extension study facilities and active clinical assistantships for men desiring to specialize in these branches, and it will endeavor by regular examinations to determine the competence of specialists in obstetrics and gynecology who apply for the certificate. Certain outstanding specialists will be granted certificates on the basis of their attainments alone, but only by a vote of the entire board after recommendation by the Committee on Requirements. A second group is asked to undergo a practical clinical examination, whereas a third and younger group has both written and clinical examination and must submit records of a group of cases in order to qualify.

It is expected that both the medical and the lay public, including hospital directors, will soon come to utilize the certificate from this board as a means of discriminating between those who are well grounded as specialists in obstetrics and gynecology and those who are not.

The board does not intend in any way to interfere with or limit the professional activities of any duly licensed physician, but it does aim toward standardized qualifications for specialists in obstetrics and gynecology.

Any well qualified obstetrician and gynecologist should have no difficulty in obtaining a certificate and the board is desirous of receiving applications from those to whom this applies.

The first examination for candidates in group 3 will be held by G. D. Royston in St. Louis and W. R. Cooke in Galveston for the district comprised by Missouri, Kansas, Nebraska, Arkansas, Texas, Arizona, Oklahoma and New Mexico.

The examination will consist of ten questions on obstetrics and gynecology, and a minimum rating of 75 per cent will be required. Each candidate for Group 3 also will be required to submit typewritten reports on a total of fifty (50) obstetrical and gynecological operations which he has performed, and these case records are to be presented with his examination paper to his local examiner on March 14.

The practical, or oral, clinical and laboratory examination will be held in Philadelphia, Pa., on Saturday, June 6, 1931, commencing at 9 a. m., and will be given to all applicants in Group 2 and Group 3. The candidates will be expected to identify and discuss three or four common obstetrical and gynecological pathologic specimens and the histologic sections taken from them. The clinical part of the examination will be conducted in a hospital where an individual case will be discussed in detail with each candidate. An endeavor will be made to adapt the details of the oral examination to each candidate's experience and practice, and will be particularly directed to ascertain his familiarity with recent obstetrical and gynecological literature, the breadth of his clinical experience, and his general qualifications as a specialist in Obstetrics and Gynecology.

Detailed information and application blanks may be secured from Dr. Paul Titus, Secretary, 1015 Highland Building, Pittsburgh, Pa.

SOCIETIES

BARTON COUNTY MEDICAL SOCIETY

The Barton County Medical Society met in annual session in the auditorium of St. Rose Hospital, December 10, 1930, at 8:00 p. m.

The meeting was called to order by the president, Dr. T. J. Brown. Minutes of last meeting were read and approved. This being the annual meeting for election of officers for next year it was voted that the regular order be set aside and the present officers be re-elected by acclamation. Carried.

The Secretary read a communication from the State Society that Dr. A. C. Johnson of Pawnee Rock, Kansas, had moved from Labette County and was automatically a member.

It was moved that Dr. G. A. Koerber practicing at Hoisington, Kansas, be elected to membership. Carried. This brought out the fact that this action made Barton County 100 per cent in membership, there being eighteen active practitioners in the county and eighteen in the county society.

It was decided that the Secretary-Treasurer should pay all membership dues in the State Society and A.M.A. in consequence of the County Society handling the county poor work.

There being no further business and no program having been prepared the meeting adjourned after voting to hold an early spring meeting and banquet.

L. R. McGill, Secretary.

BOURBON COUNTY SOCIETY

The Bourbon County Medical Society met in regular session at the Goodlander Hotel for the annual banquet, with the wives as guests of the doctors, at 7 p.m., Dec. 15, 1930, with Dr. Gooch in charge.

Minutes of the last meeting read and approved. Since this was the time for the election of officers for the coming year the results were as follows: R. Y. Strohm, president; J. D. Hunter, vice president; R. L. Gench, secretary-treasurer.; R. O. Crume, censor, and W. S. Gooch, delegate.

Dr. Smith of Crawford County asked the society what it thought of having joint meetings, with a view of having the fellows together several times a year.

There has been a report in the paper that our water supply is impure, which led to a discussion of the subject. No definite action taken, since we are to meet with Dr. Earle Brown shortly.

Following the banquet Dr. George Lee of Kansas City, Mo., as our guest speaker, spoke on "Disorders of the Heart." He gave a very interesting, comprehensive and practical paper. Questions were asked by Drs. Gench, Kennedy, Marshbanks, Newman and Smith.

Dr. J. C. Montgomery, who is connected with the health services of the state, also gave a brief talk on health matters.

Meeting adjourned.

R. Y. Strohm, Secretary.

CLAY COUNTY MEDICAL SOCIETY

The December meeting of the Clay County Medical Society was held at the Clay Center Country Club on the evening of the 11th. Thirteen members and thirty-seven visitors were present at a seven o'clock dinner. The visitors included a number of the doctors in the district outside of the county and their wives and the wives of the society members. Colonel Ruffner, Chief of Medical Staff at Fort Riley, and six of his medical officers were present together with their wives.

The annual reports of the secretary and the treasurer were read and on motion were accepted and placed on file. The election of officers for 1931 was the next order of business. Dr. C. C. Stillman of Morganville was elected president; Dr. W. R. Morton of Green was elected vice president; Dr. F. R. Croson of Clay Center was elected secretary-treasurer; Dr. G. W. Bale of Clay Center was elected to the board of censors, and Dr. E. C. Morgan of Clay Center was elected as the official representative to the state meeting.

Following the business session, Dr. Harold P. Kuhn and Dr. Ferdinand Helwig, both of Kansas City, Mo., gave very interesting and instructive informal talks on coronary disease. A number of case histories were reviewed and the

pathological specimens were demonstrated by Dr. Helwig.

Dr. J. D. Colt, Sr., of Manhattan announced the state meeting which was to be held in their city in May, 1931.

It was moved and carried that the January 1931 meeting be held at the Country Club in conjunction with the January meeting of the Clay County Dental Society.

On motion the meeting adjourned at 10:47 p. m.

F. R. Croson, Secretary.

SUMNER COUNTY SOCIETY

At the meeting of the Sumner County Medical Society, on December 18, 1930, at the Community Park House, in Wellington, the following program was given:

Paper, "The Causes, Effects and Treatment of Acute and Chronic Oxygen Want," by Dr. C. F. Nelson, of the Biochemistry Department of the University, Lawrence, Kansas.

Paper, "Conservatism in the Treatment of Nasal Accessory Sinus Infections," Dr. I. H. Dillon, Wellington, Kansas.

Following the program the following officers were elected for 1931: President, Dr. R. C. McIllheny, Conway Springs; vice president, Dr. J. A. Phillipsen, Wellington; secretary-treasurer, Dr. I. H. Dillon, Wellington; censor, Dr. F. G. Emerson, Wellington; delegate, Dr. W. A. Heap, Mulvane; alternate, Dr. I. H. Dillon, Wellington.

Drs. J. M. McGrew, Wellington; J. P. Turner, Mulvane, and G. M. Wooden, Argonia, were elected to membership.

I. H. Dillon, Secretary.

DEATHS

Norton J. Taylor, Berryton, aged 88, died December 19, 1930. He graduated from the University of Pennsylvania Medical School in 1865. He located at Berryton in 1869 and has practiced there continually until a few weeks before his death. He was a member of the Society.

Charles Rewerts, Garden City, aged 45, died suddenly on December 17, 1930. He graduated from the University Medical College, Kansas City, Missouri, in 1911 and had practiced in Garden City for twenty years. He was a member of the Society.

Fred a Cogswell, Leona, aged 67, died in October (1930) in Wetmore. He graduated from the University of Iowa College of Medicine in 1889.

BOOKS

Physical Diagnosis by Warren P. Elmer, M.D., Associate Professor of Clinical Medicine, Washington University and W. D. Rose, M.D., Late Associate Professor of Medicine in the University of Arkansas. Published by C. V. Mosby Co., St. Louis. Price $10.00.

While this is a new work on physical diagnosis it is not another one. It is in fact a reconstruction of Dr. Rose's work which justifies the use of his name in connection with the authorship. Much of the original material has been retained, some has been rewritten and considerable new matter has been added.

Compend of Bacteriology by Robert L. Pitfield, M.D., and Howard W. Schaffer, M.D. Fifth edition. Published by P. Blakiston's Son & Company, Philadelphia. Price $2.00.

These little compends seem to have a place in medicine. No doubt they help the student who is preparing for an examination and perhaps they help the busy practitioner to understand some of the etiological discussions he hears or reads. This one now in its fifth edition seems to have found a demand and its careful preparation no doubt justifies a kind reception.

Human Anatomy, Piersol's ninth edition, revised under the supervision of G. Carl Huber, M.D., Professor of Anatomy, director of anatomic laboratories and dean of the graduate school, University of Michigan. Published by J. B. Lippincott Company, Philadelphia. Price $10.00.

One would hardly expect very much change in a revision of an elaborate work on anatomy. Nevertheless considerable has been added, especially concerning the histogenesis of the blood elements, the development of the lymphatics and the primary veins, the peripheral nervous system and fibre paths of the central nervous system. There has also been some changes in the nomenclature. Apparently it is still Piersol's Anatomy, whose anatomical features can never grow old.

Treatment of Epilepsy by Fritz B. Talbot, M.D., Clinical Professor of Pediatrics, Harvard University Medical School. Published by The MacMillan Company, New York. Price $4.00.

In harmony with the newer conception of the conditions to which the term epilepsy has long been applied the author describes the more recent methods of treatment. Particular attention has been given to the theory and therapeutic use of the ketogenic diet. He seems to think the long continued success with this treatment justifies new methods of treatment. The technique of the dehydration method is also given. This book presents a very comprehensive discussion of the subject which will be found of service to practitioners.

The Medical Clinics of North America. (Issued serially, one number every other month.) Volume 14, No. 3. (Mayo Clinic Number, November 1930) Octavo of 261 pages with 50 illustrations. Per Clinic year, July 1930 to May 1931. Paper, $12.00; Cloth, $16.00 net. Philadelphia and London: W. B. Saunders Company, 1930.

The clinic of Eusterman and others deals mostly with ulcer and carcinoma of stomach, but a case of carcinoma of the prostate with extensive metastasis is also described. Rivers also discusses peptic ulcer. Adams describes a case of diabetes with thrombo-angiitis obliterans. Vinson reports some cases of foreign bodies in bronchi. Bergen and Giffin report cases of chronic ulcerative colitis with splenomegaly. O'Leary discusses the use of typhoid vaccine in the treatment of neurosyphilis. Moench and Drips report cases with growths of various kinds in the uterus. Barborka has a very interesting paper on obesity. Smith and Keith report on perinephritic abscess. Maytum discusses the differential diagnosis of asthma. Stuhler and Nickel discuss purpura of infectious origin. These subjects selected at random will give some idea of the contents of this number of the clinics.

Medical Biometry and Statistics. By Raymond Pearl, PhD., Sc.D., LL.D., Professor of Biology in the School of Hygiene and Public Health, and in the Medical School, Johns Hopkins University, Baltimore, Md. 459 pages. Second edition, revised and enlarged. Philadelphia & London: W. B. Saunders Company, 1930. Cloth, $5.50.

Instruction in the preparation of statistics is important, but in recent years it is quite as important for the reader to understand the mathematical principles involved in their preparation. In fact there is now in the current literature a lot of ultra scientific matter that is meaningless to most of us. One wonders if it would not be a more profitable undertaking to simplify this matter rather than try to teach us how to understand it.

Operative Gynecology by Harry Sturgeon Crossen, M.D., Professor of Clinical Gynecology, Washington University and Robert James Crossen, M.D., Instructor in Clinical Gynecology and Obstetrics, Washington University. Fourth edition. Published by C. V. Mosby Company, St. Louis. Price $15.00.

This is a complete revision of Crossen's book. Four new chapters have been added; genital fistulae, diseases of the urinary tract in relation to pelvic surgery, diseases of the intestinal tract in relation to pelvic surgery, and anesthesia in gynecologic surgery. There are also four hundred new illustrations. In the description of the various operative procedures much attention is given to detail.

A Primer for Diabetic Patients. By Russell M. Wilder, M.D., Professor and Chairman of the Department of Medicine, University of Chicago Clinics; Formerly head of the Section of Nutrition, Division of Medicine, Mayo Clinic. Fourth edition, revised. 138 pages. Philadelphia and London: W. B. Saunders Company, 1930. Cloth. $1.50.

The fourth edition of this little book has not been changed very much. The author seems to think that the more liberal carbohydrate diets are not quite satisfactory. Many diets and many recipes are given.

Chronic Arthritis and Rheumatoid Affections by Bernard Langdon Wyatt, M.D., with the collaboration of Louis I. Dublin, M.D. Published by William Wood & Company, New York. Price $2.50.

One should not expect to read of a specific remedy for chronic arthritis and the author does not offer one. He does describe in considerable detail various methods of treatment which have more or less value in the prevention and relief of various forms of arthritis. The discussion of the causes of arthritis is instructive although but a review of the literature now extant.

The Prophylaxis of Cocaine and Allied Intoxicants

A study to determine the efficiency of barbital compounds in the detoxication of local anesthetics has been made. The minimal tolerated and minimal lethal doses of cocaine, procaine and butyn for rabbits were determined without protection and after the administration of various depressants. The depressants found effective and in the order of their efficiency were urethane (ethyl carbamate), chloral hydrate, paraldehyde, barbital, phenobarbital, and isoamylethyl-barbituric acid, the last named being the most effective. The investigators find that there are two types of intoxication into which clinical cases may be divided. One has a prolonged course and death results from primary respiratory failure; the other has a short course and death results from primary cardiac failure. The first type is reproduced experimentally by subcutaneous injection of cocaine, the second type by intravenous injection. Against this second type of intoxication the depressants are valueless. (J.A.M.A., Dec. 13, '30.)

———R———

Pregnancy and Tuberculosis

Harvey R. Matthews, Brooklyn, and Louise Stevens Bryant, New York (J.A.M.A., Dec. 6, 1930), sent a questionnaire to 1,000 married women graduates of Trudeau Sanatorium, inquiring as to their experience with child-bearing. Nearly half responded, 484 in enough detail to make possible certain comparisons and observations, which are presented. One-third of the 484, or twice the highest figure set for involuntarily sterile marriages, never became pregnant. (Estimates for involuntarily sterile marriages range from one in six to one in ten.) The other two-thirds proceeded with caution. They became pregnant only about half as frequently as the average, if the women attending birth control clinics can be taken as the average. Finally, they brought to living birth a far smaller proportion of the children conceived than appears usual. Just over half of the group, 287, bore even one living child, and these bore a scant two apiece. Those who bore more than one or two living children had done so before contracting tuberculosis. Losses before and immediately after birth were disproportionately high, averaging thirty-five to every hundred living births. But losses after birth were extremely infrequent. Most of the babies were breast fed and kept on a careful regimen, and nearly all were given medical examination, so that only a third of the expected number died in infancy, and few thereafter. Of the 579 children born alive, 556 were still alive when their mothers reported, fifteen years later. The majority of these women did not claim any relationship between tuberculosis and pregnancy. Only one-third of those pregnant at any time found that the disease began or recurred with a pregnancy or after a delivery or an abortion. But, of all women pregnant before "cure," 44 per cent had found their tuberculosis adversely affected. The more advanced the tuberculosis, the more deleterious the effect of pregnancy. The women who took sufficient time before getting pregnant after being "cured" (three years or more), and who obeyed all rules and regulations after leaving Trudeau, fared better than those who did not. Postpartum hemorrhage occurred in a very large proportion, amounting to 44 out of 317 cases, or 13 per cent. Menstrual disorders were very common among this group of tuberculous women, being reported by 47 per cent. Out of the 579 children born, 556 are alive, and 501 are healthy and well. Fifty-five are below par, and only 9 of these have had tuberculosis in any form, or have been suspected.

———R———

Reaction of Content of Gastro-Intestinal Tract

Frank C. Mann and Jesse L. Bollman, Rochester, Minn. (J.A.M.A., Dec. 6, 1930), have developed a method for repeatedly securing, under normal physiologic conditions, specimens of the gastro-intestinal content at various levels of the tract. Estimation of the acidity in the fasting animal showed that the gasric juices are usually strongly acid, *p*H 1.5 to 2.0, but may be at times almost neutral. The content of the duodenum, jejunum, ileum and colon is usually

found to be alkaline, *p*H 7.0 to 8.0, with the exception that the content of the duodenum may be found to be acid when highly acid values are found in the content of the stomach. Following a meal, the acidity of the content of the gastro-intestinal tract depends largely on the development of acid in the stomach. Short periods of high acidity of content are common in the duodenum and less common in the small intestine, the greater the distance from the pylorus. The usual reaction in the small intestine, after a meal, is close to neutrality, *p*H 6.5 to 7.5. The content of the colon is usually slightly alkaline but may be slightly acid, especially following a meal rich in carbohydrate. Dietary measures may greatly alter the acidity of the content of the gastro-intestinal tract.

———℞———

Incidence of Bromide Intoxication Among Psychotic Patients

Since March, 1928, a determination of the bromide content of the blood serum has been a part of the routine in the examination of all patients admitted to the Colorado Psychopathic Hospital. Carl P. Wagner and D. Elizabeth Bunbury, Denver (J.A.M.A., Dec. 6, 1930), have made a study of the first thousand consecutive cases so examined. Of the thousand cases examined, 7.7 per cent showed bromide in the blood serum in a concentration of 75 mg. per hundred cubic centimeters and over. Of these, thirty-three, or 42.85 per cent, had received the bromide on a physician's prescription; fourteen, or 18 per cent, had taken "patent" medicines; and in thirty, or 38.95 per cent, the source of the drug remained undetermined, but undoubtedly these patients had also taken "patent" medicines, although most of them denied that they had taken medicine of any kind, even when they were confronted with the fact that their illness was due to drug intoxication. In seventeen, or 22.08 per cent, admission to the hospital was sought entirely on account of drug intoxication. Most of these patients recovered before or shortly after leaving the hospital. However, two cases terminated fatally, and in these death was due to the indiscriminate use of bromides only. Both of these patients showed a bromide concentration of over 300 mg. per hundred cubic centimeters of blood. On admission, both had been under the care of a physician and had been taking bromide on prescription. Five other cases terminated fatally. One of these, a patient with dementia paralytica, showed only 75 mg. per hundred cubic centimeters, and the authors do not feel that the bromide contributed toward his death. The four remaining patients, one with cerebrospinal syphilis, one with senile dementia, and two with cerebral arteriosclerosis, died of cardiac decompensation. In these the bromide contributed toward their death in that the excitement due to delirium aggravated the decompensation. The authors assert that undesirable mental symptoms can be reduced to a minimum if the physician will be on the outlook for exacerbation of mental symptoms during bromide administration or if he is willing to make determinations of bromide concentration in the blood. Special care should be exercised in the administration of bromide in cases of organic nervous disorders, particularly those in which the excretory or circulatory functions are impaired.

———℞———

Acute Intestinal Obstruction

The most important single factor in the clinical consideration of acute intestinal obstruction, says Irvin Abell, Louisville, Ky. (J.A.M.A., Dec. 20, 1930), is the element of time; a second one of great moment is offered by the site and character of the obstruction, whether high or low, the former pursuing a more rapidly fatal course than the latter. The precise significance of these two factors becomes apparent with a full realization of the sequence of events common to all types of acute intestinal obstruction; namely, mechanical obstruction of the intestine with stoppage of the fecal current, damage to the bowel wall with ultimate gangrene and peritonitis, and an associated production of toxins often of the most virulent type. The high mortality that has obtained and still obtains in the treatment of intestinal obstruction is a serious indictment of both diagnostic ability and surgical initiative. While

acute intestinal obstruction carries an inevitable mortality, the greater portion of the mortality may justly be attributed to delay in recognition and to tardiness in the institution of appropriate surgical treatment. The solution of the problem in the early hours following the advent of obstruction, when but simple obstructions are present, may require nothing further; the mortality is low and the results are brilliant if the obstruction is relieved before the wall of the bowel is compromised by pressure or strangulation, volvulus or thrombosis. With the incidence of the complications dependent on strangulation and toxemia, which invariably follow the continued presence of the obstruction, the relief of the obstruction becomes but one of the indications to be met and the risk of any operative procedure is enormously enhanced. Unfortunately, an attitude of ultraconservatism in diagnosis, awaiting the onset of symptoms that prove the presence of obstruction but also indicate the approach of dissolution, has been, if not the accepted rule, then one quite commonly followed. It is an unpardonable mistake to spend invaluable time in making differential diagnosis when symptoms of an abdominal emergency are evident. The presence of abdominal pain, vomiting and constipation with an absence of fever and leukocytosis should put the burden of proof on the medical attendant to show that no obstruction exists. The history, particularly if previous abdominal ailments are indicated, the physical examination, the presence of active peristalsis, visible or audible, with the flat roentgenogram interpreted by a competent radiologist, in addition to the three cardinal symptoms mentioned, should permit of a working diognosis before the accession of fever, leukocytosis, distention and paresis indicates changes brought about by strangulation, and chemical examination of the blood shows profound alterations. Morphine and purgatives but compound the felony of delay. The former, with its relief from pain afford the patient a false sense of security, denies him the relative safety which early operation offers and lets him drift into the dangers of delay, while the latter merely increases the damage which an already active peristalsis inflicts. The principles underlying the surgical treatment of acute intestinal obstruction are discussed under three headings: the preparation of the patient, the operation, and the postoperative treatment.

℞

Growth of Bone and Development of Rickets

The data collected thus far by Edward Clay Mitchell and Martha V. Nelson, Memphis, Tenn. (J.A.M.A., Dec. 20, 1930), indicate that the bone growth of well fed, rapidly growing, active infants is not necessarily symmetrical during the first year of life and fails to conform to the standard conception of nonricketic bone development. Whether this is due to the absence of a sufficient quantity of vitamin D or to the present conception of the character of ricketic bone changes is a subject for further investigation.

℞

Yeast

Yeast has so uncertain a laxative effect that it is hardly justifiable to class it among the cathartics. It might more appropriately find a place among the laxative diet factors alongside bran, honey and prunes. Its content of vitamin B makes it of specific value in skin eruptions due to vitamin B deficiency, such as those occuring in pellagra. That it is of much value in other skin troubles, such as acne or furunculosis, is doubtful. The history of yeast suggests that it has a therapeutic value, but that this value is slight indeed. (J.A.M.A., June 14, '30.)

REPRINTS

Reprints of original articles will be furnished the authors at the following rates, if the order for same is received within fifteen days after the Journal is mailed. These prices are based on the number of pages of the Journal the article occupies:

Three pages or less, first 100, $9.00; additional 100's, $2.50. Four pages, $12.00; add. 100's, $3.00. Five pages, $15.00; add. 100's, $4.00. Six pages, $18.00; add. 100's, $5.00. Seven pages, $21.00; add. 100's, $6.00. Eight pages, $24.00. add. 100's, $7.00.

If orders are received after the forms are destroyed an additional charge will be made to cover the cost of resetting the type.

These reprints are standard form, with cover. each page of the Journal making 3 pages of reprint.

Wifey—"The man said that this vacuum bottle will keep anything hot or cold for 72 hours."

Hubby—"Don't want it. If I have anything worth drinking I don't want to keep it for 72 hours."

✣ ✣ ✣

Rev. George Washington Jackson had lost a fine, fat 'possum. Later, at a revival, one of the grief-stricken mourners would not be comforted.

"Cheer up, brothah," exhorted Rev. Jackson.

✣ ✣ ✣

"No matter what yo' sin, it will be fo'given."

"But not diss'un," sobbed the mourner. "Ah sho' am a pow'ful sinnah."

"Yo' stole some white man's chickens?"

"Wussen 'at!"

"Oh, Lawd, help dis po' lamb. Has yo' used a rassuh?"

"Wussen 'at, It's wussen murdah, Brothah Jackson!"

"Den Ah knows," shouted the preacher, coming down from the pulpit, peeling his coat. "De good Lawd kin fo'give yo' effen he feels dat a way, but Ah's gwine to climb yo' frame. Yo's de skunk what stole mah 'possum."

✣ ✣ ✣

Little Lotty: Mother, do all fairy tales begin, "Once Upon a Time?"

Mother: No, dear; some begin, "I'll be working late at the office."—Answers.

Lady (to bothersome tramp-: "Here is a home-made cake. Now I hope I won't see you any more."

Tramp: "Well, lady you know your own cooking better than I do."—Mug.

WANTED—Salaried Appointments for Class A physicians in all branches of the Medical Profession. Let us put you in touch with the best man for your opening. Our nation-wide connections enable us to give superior service. Aznoe's National Physicians' Exchange, 30 North Michigan, Chicago. Established 1896. Member The Chicago Association of Commerce.

DIABETICS

have palatable

Starch-free Bread

when you prescribe

Listers

DIETETIC FLOUR

Self-rising — contains no starch, no gluten

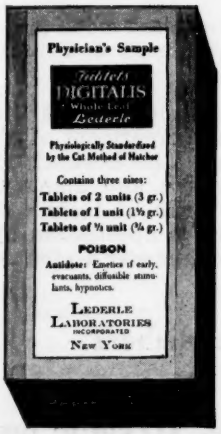
Ask for nearest Depot or order direct

LISTER BROS. Inc. 41 East 42nd Street NEW YORK, N. Y.

DIGITALIS

TABLETS *Lederle*

Standardized Whole Leaf



THIS Physician's Sample package containing 3 vials of one-half, one and two cat units respectively, sufficient to digitalize and maintain one patient for a week, will be sent to a Physician on request.

LEDERLE LABORATORIES

INCORPORATED

511 FIFTH AVE., NEW YORK

Nonspi

For Excessive Armpit Perspiration

Physician's samples sent without cost or obligation.

THE NONSPI COMPANY
2652 WALNUT STREET
KANSAS CITY, MISSOURI

Send free NONSPI samples to:

Name.....

Street.....

City.....

TRADE NONSPI MARK

New (Third) Revised and Enlarged Edition

BALYEAT'S

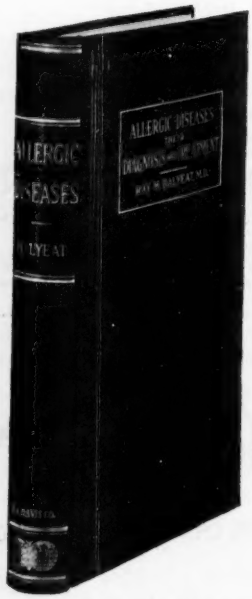
ALLERGIC DISEASES

Their Diagnosis and Treatment

A Practical Treatise of Allergic Diseases—Asthma, Seasonal Hay Fever, Perennial Hay Fever, Migraine, Urticaria, and Certain Forms of Eczema and Chronic Colitis

By

RAY M. BALYEAT, M.A., M.D., F.A.C.P.



Lecturer on Allergic Diseases, University of Oklahoma Medical School; Director of Balyeat Hay Fever and Asthma Clinic, Oklahoma City, Oklahoma.

Three hundred and ninety-five pages, 6x9, illustrated with 87 engravings, line drawings and charts, and 4 colored plates. Third Revised and Enlarged Edition. Price, cloth binding, $5.00.

Prepared primarily for the practitioner and the student of medicine, the fundamental principles of allergy are fully discussed. Detailed methods for determining the cause of hay fever and asthma, and the practical application of the preventive, palliative and curative measures, are clearly given. It is profusely illustrated, which makes it easily understood by one who is not a specialist.

THE MOST IMPORTANT FEATURES of the new edition are the 8 new chapters on diseases other than hay fever and asthma, due to allergy, namely, migraine, urticaria, and certain forms of eczema and colitis,—syndromes that have long perplexed the medical profession. In these chapters will be found much practical information concerning their diagnosis and treatment.

About 10 PER CENT of the population of the United States sometime in life suffer from some form of allergy. The methods of diagnosis and treatment of allergic diseases are poorly understood by the average physician. This book offers the physician a guide to the practical methods of their diagnosis and management. Dr. Balyeat has given particular attention to the methods of technique and plans of management which lend themselves most readily to application by the general practitioner. It is the work of an experienced teacher and a pioneer in the study and treatment of diseases due to allergy.

F. A. DAVIS COMPANY—Medical Publishers
Philadelphia, Pa.

You may send me a copy of the new 3rd edition of Balyeat's ALLERGIC DISEASES. Price $5.00.

Name..... **Address**.....

APPLICATION FOR MEMBERSHIP

To the Officers and Members of the

.....**County Medical Society**

GENTLEMEN:—I hereby make application for membership in your Society, and, if accepted as a member, I agree to support its Constitution and By-laws, to practice in accordance with the established usages of the profession, and will in no way profess adherence or give my support to any exclusive dogma or school.

1. I was born at.....on the.....day of.....1.....

2. My preliminary education was obtained at.....
(Public schools, high school or college)

.....located at.....from which I
(City and State)

graduated in the year 1.....and received the degree of.....

3. My medical education was obtained at.....
(Name of Medical College)

.....located at.....

from which I graduated in the year 1.....

4. My state certificate was issued.....
(Name of State and date of license under which you are practicing)

5. I have practiced in my present location.....years; and at the following places for the years named.....
(Name each location and give dates)

.....

6. I hold the following positions:.....
(Give college and hospital positions, insurance companies for which you are the examiner, etc.)

.....

.....

7. Specialty.....

8. Residence.....Street

9. Office.....Street

10. Office Hours.....

Respectfully, Name.....

P. O.....

County.....

State .....

NOTE.—The above information is primarily for use in the Card Index System of the County and State and for the American Medical Directory.

KANSAS MEDICAL SOCIETY

CHARTERED BY THE TERRITORIAL LEGISLATURE OF KANSAS, FEBRUARY 19, 1859

President—E. S. EDGERTON, M.D., Wichita, Kan.

President-Elect—E. C. DUNCAN, M.D., Fredonia

Vice-President—J. B. CARTER, M.D., Wilson

Secretary—J. F. HASSIG, M.D., Kansas City Treasurer—GEO M. GRAY, M.D., Kansas City

Executive Committee of Council

E. S. Edgerton ..... Wichita
J. F. Hassig ..... Kansas City
Geo. M. Gray ..... Kansas City
O. P. Davis ..... Topeka

Defense Board

O. P. Davis, Chairman ..... Topeka
W. F. Fee ..... Mead
C. C. Stillman ..... Morganville

Bureau of Public Relations

E. S. Edgerton ..... Wichita
J. F. Hassig ..... Kansas City
Geo. M. Gray ..... Kansas City
O. P. Davis ..... Topeka
Earle G. Brown ..... Topeka
W. S. Lindsay ..... Topeka
Alfred O'Donnell ..... Ellsworth
W. E. McVey ..... Topeka

Committee on Public Health and Education

Earle G. Brown ..... Topeka
J. T. Axtell ..... Newton
W. P. Callahan ..... Wichita
H. E. Haskins ..... Kingman
Geo. I. Thacher ..... Waterville
L. B. Gloyne ..... Kansas City

Committee on Public Policy and Legislation

W. S. Lindsay ..... Topeka
C. S. Huffman ..... Columbus
Karl A. Menninger ..... Topeka
E. S. Edgerton, Ex-officio ..... Wichita
J. F. Hassig, Ex-officio ..... Kansas City

Committee on School of Medicine

Alfred O'Donnell ..... Ellsworth
L. F. Barney ..... Kansas City
L. G. Allen ..... Kansas City
H. J. Duvall ..... Hutchinson
F. A. Trump ..... Ottawa

Committee on Hospital Survey

Geo. M. Gray ..... Kansas City
David W. Basham ..... Wichita
Wm. M. Mills ..... Topeka

Committee on Medical History

W. E. McVey ..... Topeka
W. S. Lindsay ..... Topeka
O. D. Walker ..... Salina

Committee on Scientific Work

J. F. Hassig ..... Kansas City
W. E. McVey ..... Topeka
H. L. Chambers ..... Lawrence

Committee on Necrology

B. R. Riley ..... Benedict
W. E. McVey ..... Topeka
J. F. Hassig ..... Kansas City

Committee on Stormont Medical Library

Wm. C. Menninger ..... Topeka
W. F. Bowen ..... Topeka
J. L. Lattimore ..... Topeka

COUNTY SOCIETIES

Members of the Component County Societies are members of the Kansas Medical Society. Physicians residing in counties where no County Society exists may join the society of an adjoining county. Physicians residing where no County Society exists, who are members of a district or other independent society approved by the Council, may be admitted to membership.

ANNUAL DUES due on or before February 1st of each year.

Dues should be paid to the Secretary of the Component County Society, or, if not a member of a County Society, to the Secretary of the Kansas Medical Society.

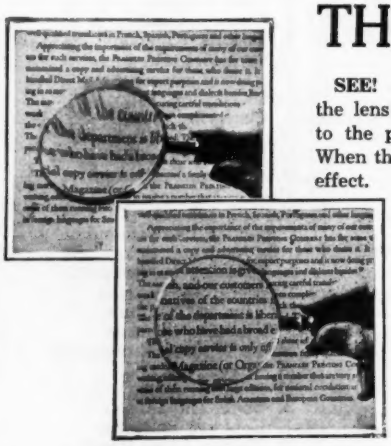
OFFICERS FOR 1930

COUNTY	PRESIDENT	SECRETARY
ALLEN	R. O. Christian, Iola	P. S. Mitchell, Iola
ANDERSON	W. K. Johnson, Garnett	J. A. Milligan, Garnett
ATCHISON	M. T. Dingess, Atchison	T. E. Horner, Atchison
BARTON	T. J. Brown, Hoisington	L. R. McGill, Hoisington
BOURBON	W. S. Gooch, Fort Scott	R. Y. Strohm, Fort Scott
BROWN	H. J. Deaver, Sabetha	S. M. Hibbard, Sabetha
BUTLER	R. W. Moore, Eureka	C. C. Brown, El Dorado
CENTRAL KANSAS	L. V. Turgeon, Wilson	F. K. Meade, Hays
CHEROKEE	R. C. Lowdermilk, Galena	W. H. Iliff, Baxter Springs
CLAY	C. C. Stillman, Morganville	F. R. Croson, Clay Center
CLOUD	A. M. Townsdin, Jamestown	R. E. Weaver, Concordia
COFFEY	H. T. Salisbury, Burlington	A. B. McConnell, Burlington
COWLEY	C. O. Hawke, Winfield	F. K. Torrence, Winfield
CRAWFORD	R. M. Markham, Pittsburg	C. H. Bendage, Pittsburg
DECATUR-NORTON	C. S. Kenney. Norton	W. Stephenson, Norton
DICKINSON	H. Marshall, Herington	D. Peterson, Herington
DONIPHAN	A. E. Cordonier, Troy	W. M. Boone, Highland
DOUGLAS	A. J. Anderson, Lawrence	L. S. Powell, Lawrence
ELK	R. C. Hutcheson, Elk Falls	F. L. DePew, Howard
FINNEY	C. P. Rewerts, Garden City	O. W. Miner, Garden City
FORD	G. O. Speirs, Spearville	W. F. Pine, Dodge City
FRANKLIN	P. R. Young, Ottawa	G. W. Davis, Ottawa
HARPER	C. E. Ressler, Anthony	E. E. Hartman, Anthony
HARVEY	Arnold Isaac, Goessel	M. C. Martin, Newton
JACKSON	E. W. Reed, Holton	C. A. Wyatt. Holton
JEWELL	J. E. Hawley, Burr Oak	C. W. Inge, Formosa
JOHNSON	C. W. Jones, Olathe	D. E. Bronson, Olathe
KINGMAN	C. W. Longenecker, Kingman	H. E. Haskins, Kingman
LABETTE	H. C. Markham, Parsons	J. T. Naramore. Parsons
LEAVENWORTH	L. Matassarin, Leavenworth	H. J. Stacy, Leavenworth
LINCOLN	H. L. Hinkley, Barnard	Malcolm Newlon, Lincoln
LINN	D. E. Green, Pleasanton	H. L. Clark, LaCygne
LYON	Albert Beam, Americus	P. W. Morgan, Emporia
McPHERSON	L. G. Little, Moundridge	G. R. Dean, McPherson
MARION	L. H. Saylor, Marion	E. H. Johnson, Peabody
MARSHALL	R. L. McAllister, Marysville	H. Haerle, Marysville
MEADE-SEWARD	G. S. Smith, Liberal	E. Trekell, Liberal
MIAMI	O. C. Lowe, Paola	J. F. Fowler, Osawatomie
MITCHELL	W. W. Weltmer, Beloit	Martha Madtson, Beloit
MONTGOMERY	J. B. Blades, Independence	J. A. Pinkston, Independence
NEMAHA	F. S. Deem, Oneida	S. Murdock, Jr., Sabetha
NEOSHO	J. A. Butin, Chanute	A. M. Garton, Chanute
OSBORNE	J. D. Johnson, Alton	S. J. Schwaup, Osborne
OTTAWA	L. M. Hinshaw, Bennington	C. M. Vermillion, Minneapolis
PAWNEE	F. W. Ewing, Larned	Glen Weaver, Larned
PRATT	J. R. Campbell, Pratt	E. M. Ireland, Coats
RENO	F. W. Koons, Nickerson	C. A. Boyd, Hutchinson
REPUBLIC	M. D. McComas, Courtland	H. E. Robbins, Belleville
RICE	C. C. Price, Lyons	C. W. Haines, Little River
RILEY	G. A. Cassidy. Manhattan	H. T. Groody, Manhattan
RUSH-NESS	W. S. Singleton, McCracken	F. D. Smith, LaGrosse
SALINE	S. T. Blades	W. R. Dillingham, Salina
SEDGWICK	C. H. Briggs, Wichita	F. H. Schiltz, Wichita
SHAWNEE	A. D. Gray, Topeka	E. G. Brown, Topeka
SMITH	D. W. Relihan, Smith Center	V. E. Watts, Smith Center
STAFFORD	M. M. Hart, Mackesville	R. E. Stivison, St. John
SUMNER	W. A. Heap, Mulvane	I. H. Dillon, Wellington
WASHINGTON	H. D. Smith, Washington	W. M. Earnest, Washington
WILSON	C. H. Dewey, Elk City	E. C. Duncan, Fredonia
WOODSON	S. E. Bamford, Yates Center	H. A. West, Yates Center
WYANDOTTE	L. L. Bresette, Kansas City	L. G. Allen, Kansas City

OUR
AFTER INVENTORY
SPECIALS START
FEB. 1st 1931
WATCH FOR IT

PHYSICIANS SUPPLY COMPANY

1007 Grand Avenue Kansas City, Mo.



THERE IS A DIFFERENCE

SEE! Your reading glass shows you that the slightest tipping of the lens blurs the print. It is clear only when the glass is parallel to the printing. The ordinary eyeglass lens has the same defect. When the object is seen through it at an angle there is also a blurred effect.

Orthogons Overcome This Astigmatism

Orthogons give clear, distinct and undistorted images throughout the field of vision because no matter at what angle the eye sees through the lens, the same power of correction is before it. Orthogons assure a natural posture and movement of the head. The eye functions in a normal way.

The patient wants normal vision. He depends upon you to restore this normal condition. He appreciates your consideration when you prescribe Orthogons for his glasses which afford clear, distinct and undistorted vision.

RIGGS OPTICAL COMPANY

Chicago Kansas City, Missouri Salina, Kansas Pittsburg, Kansas San Francisco
Oklahoma City, Oklahoma St. Louis, Missouri Wichita, Kansas

JUST TO REMIND YOU

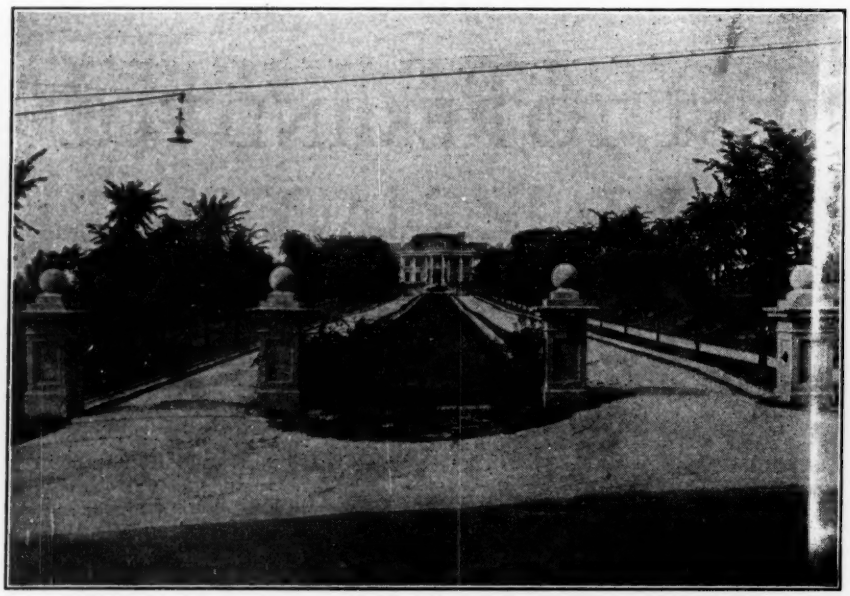
If you change your address or if the Journal is not delivered to you regularly please send a card directed to The Journal of the Kansas Medical Society, 700 Kansas Avenue, Topeka, Kansas.

If you are threatened with a suit or a suit has been brought against you for malpractice, write to Dr. O. P. Davis, Chairman of Defense Board, 917 North Kansas Ave., Topeka, Kansas.

If you want to buy instruments, office supplies or equipment, drugs or chemicals, books, or anything else, look through the advertisements in the Journal and if you don't find what you want write the Journal office and an effort will be made to find it for you.

If you have neglected to pay your dues for 1930, write the secretary of your county society and send a check for the proper amount to him.

If you move from the county in which you hold membership into another county in which there is a county society you should present your card to the secretary of that county society and send a notice of your removal to the secretary of the State Society, Dr. J. F. Hassig, 804 Huron Building, Kansas City, Kansas.



The G. Wilse Robinson Sanitarium and Neuro-Psychopathic Hospital

For Nervous and Mental Disorders
and Allied Conditions
Alcoholism and Drug Addiction

Pleasantly located, on a beautiful tract of 25 acres. Buildings are commodious and attractive. Rooms with private bath are available.

Approved diagnostic and therapeutic methods used.

Occupational therapy, recreation and entertainment.

G. WILSE ROBINSON, M.D., Medical Director
G. Wilse Robinson, Jr., M.D., Associate Medical Director
Paul A. Johnson, M.D., Resident Physician and Internist

Office: Suite 1432 Professional Building
Sanitarium: 8100 Independence Road, Kansas City, Missouri

THE NEW MENNINGER SANITARIUM

PSYCHIATRY
at the Menninger Sanitarium
Modern Treatment of Mental Disease

NEUROLOGY
at Christ's Hospital
Diagnostic and Therapeutic Measures

NERVOUS CHILDREN
at the Southard School
Home School for Feeble Minded Children

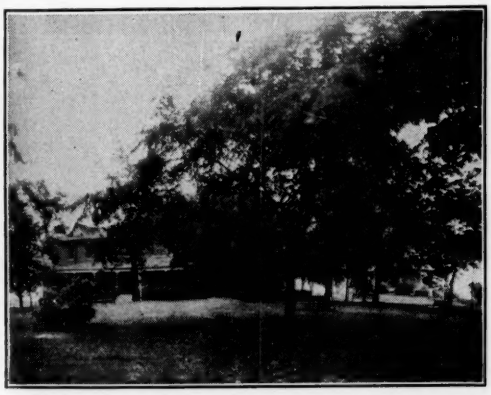
DIAGNOSIS
at the Menninger Clinic
Nervous, Mental, and Endocrine Cases

Karl A. Menninger, M.D. **C. F. Menninger, M.D.** **William C. Menninger, M.D**

TOPEKA, KANSAS

Grandview Sanitarium

KANSAS CITY, KANSAS (26th St. and Ridge Ave.)



A High Grade Sanitarium and Hospital of superior accommodations for the care of:

Nervous Diseases

Mild Psychoses

The Drug Habit

and Inebriety.

Situated on a 20-acre tract adjoining City Park of 100 acres. Room with private bath can be provided.

The City Park line of the Metropolitan Railway passes within one block of the Sanitarium. Management strictly ethical.

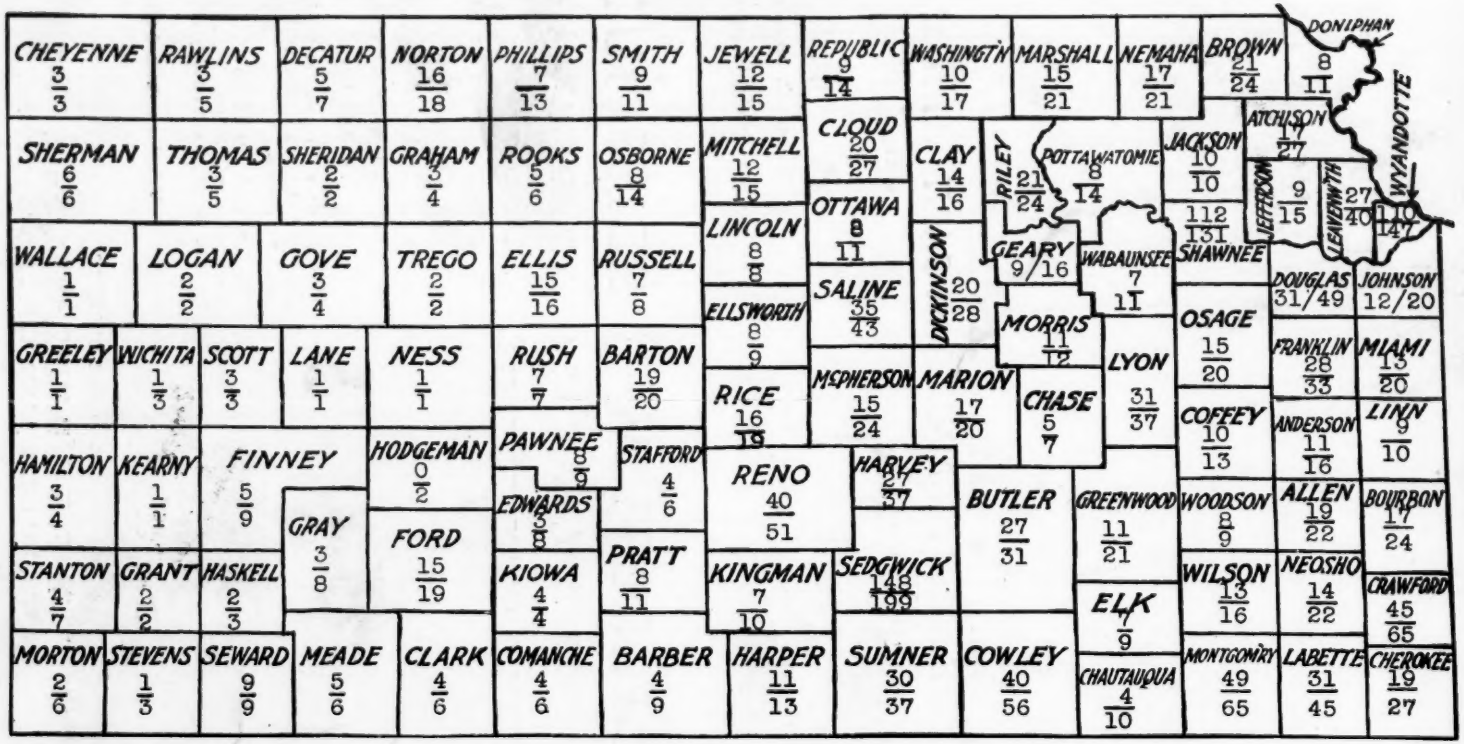
Telephone: Drexel 0019

SEND FOR BOOKLET

E. F. DeVILBISS, M.D., Supt.

OFFICE, 1124 PROFESSIONAL BLDG., KANSAS CITY, MO.

KANSAS



Circulation distribution. The figures above the line represent the number of subscribers and the figures below the line the number of registered physicians in the county.